

# Image, Memory and Monumentality

*Archaeological engagements with the material world*

edited by

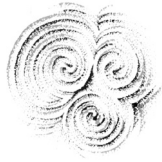
Andrew Meirion Jones, Joshua Pollard, Michael J. Allen  
and Julie Gardiner



Prehistoric Society Research Paper 5







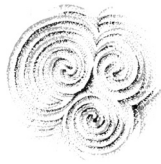
THE PREHISTORIC SOCIETY

IMAGE, MEMORY AND MONUMENTALITY









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# *Image, Memory and Monumentality*

*archaeological engagements with the material world:  
a celebration of the academic achievements of Professor Richard Bradley*

edited by

Andrew Meirion Jones, Joshua Pollard, Michael J. Allen and Julie Gardiner

*Prehistoric Society Research Paper No. 5*

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*Front cover: a cup and ring marked rock on the Ben Lawers Estate in the southern Highlands of Scotland (photograph: Aaron Watson)*

*Rear cover top: Richard Bradley standing in the Dorset Cursus, Chalk Pit Field 1984.*

*Rear cover middle: Clava Cairns, excavated by Richard in the 1990s. Photo from Walk into Prehistory by Bill Bevan.*

*Rear cover bottom: Ballymeanoch Stone Row, Kilmartin Glen. Photo from Walk into Prehistory by Bill Bevan.*

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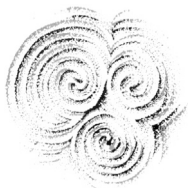
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# ABSTRACT

Although this volume is a tribute to Richard Bradley, its strength lies in the range and depth of papers that provide new information, ideas, and interpretations on many familiar archaeological themes. This volume takes, as its basis, the archaeological themes that Richard has developed through his career and has been divided into several sections that, broadly speaking, follow the chronological development of his many fields of interest and are sub-titled with reference to six of his major books (*Social Foundations of Prehistoric Britain*, *An Archaeology of Natural Places*, *The Passage of Arms*, *Ritual and Domestic Life*, *Image and Audience*, and *Altering the Earth*). The papers are, therefore, grouped in meaningful sections, giving the contents a real coherence.

The 'social foundations of prehistoric Britain' are laid in contributions by Mike Parker Pearson on Neolithic Stonehenge and by Colin Richards and Julian Thomas on the Stonehenge landscape before Stonehenge, both derived from the recent Stonehenge Riverside Project which has added many more possible layers of interpretation to this complex landscape; and by discussion of small Neolithic monuments along the Upper Thames valley by Gill Hey, and, in the north of the country, of henges and their socio-economic setting in north Yorkshire by Jan Harding. Each examines a combination of old and new data to present a discourse between social and monumental landscapes. Martin Green presents some new and unusual burials from Cranborne Chase, the scene of one of Richard Bradley's first extensive prehistoric landscape studies. These papers are complemented by Barrett's insightful examination of the economic archaeology of the Bronze Age to Iron Age transition in Britain, and Andrew Fleming's comments on

landscape archaeology and the concept, use, and mis-use of the very term 'landscape'.

The 'archaeology of natural places' is examined by two papers addressing the nature of Neolithic woodlands. Bell and Noble discuss the ecologies of these woodlands and of ecological transformations, while Allen and Gardiner examine the concept of the extent of Neolithic woodland and our assumption that the aim of prehistoric communities was to undertake activities that removed them so as to exploit resources and place monuments in an open landscape. They contend that, perhaps, it was the fact that they were still within woodland that was important.

The section on the 'passage of arms' comprises a group of very different papers. Härke begins it with a discussion of 'conquest ideology' which is defined as an attitude of mind and a set of related practices which explain and justify current social and political conditions with a real or imagined conquest in the past. He considers whether the existence and expression of a conquest myth or ideology can really be identified by purely archaeological means, largely through examination of historical accounts of Anglo-Saxon England and possible interpretations of the adoption of warrior graves and re-use of prehistoric barrows. Woodward and Needham discuss the specifics of the few but exceptional artefacts of an Early Bronze Age individual buried at Wilsford, Wiltshire. Gosden marries landscape and artefacts in an eloquent and imaginative approach through the **identification of two** different cycles of change in the British Bronze Age and Iron Age relating to the creation of farmed landscapes and the re-emergence of 'ordinary' metalwork in more elaborate and decorative forms after their disappearance

in the Early Iron Age. Cleal turns to the transverse arrowheads of the Neolithic to provide a discourse on the timing and nature of their introduction which was related to a sphere of interaction around the coastal areas of the English Channel and southern North Sea that was maintained through the middle centuries of the 4th millennium cal BC. Edmonds looks at the recent biography of axes, the 'meaning' they still seem to impart thousands of years after their manufacture, and the symbolic referents they have for modern collectors, museum curators and chance-finders alike. Sheridan takes us back to the well-trodden Kilmartin Glen providing an incisive chronological narrative of this evocative and complex monumental landscape between the early 4th and early 1st millennium BC and places it within the broader narrative of developments elsewhere in western Scotland and beyond.

Ian Hodder opens the batting in 'Ritual and domestic life' on the theme of history-making in the Early Neolithic settlement of Çatalhöyük revealing how the process of memory construction can be seen in varied material projects, including house building, burial and the retrieval of skulls and sculptures. He argues that social organisation at the site was based around 'history houses' made up of groups of houses centred on a central house in which the dead were preferentially buried and ritual and symbolic markers were amassed, leading to long term social stability. This resonates with Whittle's contribution which examines the relationship between longhouses and graves of the *Linearbandkeramik*. He argues that house and cemetery grave were often interchangeable images: the grave, or grave and body, perhaps being seen as a house while the house could have been conceptualised as a body. Howard Williams extends the theme of memory and concepts of death with a discussion of memorialisation of the dead in contemporary Sweden, showing how memory groves create a sense of nostalgia and primordial antiquity and how ashes are used to create different bonds between the living and the dead in association with contrasting material cultures, monumentalities, and landscapes.

In 'image and audience' an international group of leading authorities from Britain, Scandinavia and South Africa take various

approaches to the interpretation of rock art and its context. Goldhahn challenges conventional distinctions between the rare rock art images found in closed burial contexts and the more common finds of rock art on outcrops in the landscape in northern Europe, arguing that the interpretation of rock art's significance must be based on manifold criteria, such as its iconography, its structure, its relationship to other prehistoric remains, and its setting in the landscape. Kaul, also discussing Scandinavian rock art, further challenges recent interpretations and illustrates how ship images could reflect occasional visits of travelers or long distance contacts or expeditions. Lewis-Williams draws parallels between Richard Bradley's work on rock art in Scandinavia and his own on southern African San rock art showing how, in both regions, people believed in a three-tiered cosmos that provided a framework for belief and ritual, and that the rock art in each was concerned with transcosmological travel. Fábregas Valcarce and Rodríguez-Rellán review the interpretation of Galician rock art as an open or hardly-restricted phenomenon, drawing attention to physical constraints that existed on its observation and addressing several controversial issues surrounding the dating of Galician rock art and its precise relationship with the domestic sphere. Such academic debates are also reflected upon by Bacelar Alves, who examines how the research legacy, paradigms of mainstream archaeology and modern science, have shaped current knowledge of rock art in Galicia and north-west Portugal. Beckensall examines recent advances in rock art studies in Britain, reviewing its interpretation, recording, excavation, and theoretical concerns, as well as conservation issues. Finally in this section Peter Skoglund considers the relationship between people and trees as depicted in Scandinavian Bronze Age rock art and suggests that these images depict manipulated deciduous trees which are not a true-to-life description of people's interactions with trees, but rather ones of rituals where the collection of leaves was a substantial element.

The final section 'altering the earth' begins with David Yates' examination of the possible cosmological orientations of Bronze Age field systems which may have been laid out to marry the earth with the sky, while Chris Evans invites us to evaluate the interpretational framework applied to under-rated excavation data at more

than the site and incident level – developer-funded archaeology may have facilitated more recording, but has it fragmented the record? The volume concludes with Aaron Watson’s

striking pictorial narrative describing four different sites and the different techniques and methods used in their archaeological examination and landscape interpretation.

## Résumé

### *Rendez-vous archéologiques avec le monde matériel, célébration des accomplissements archéologiques du Professeur Richard Bradley*

Bien que ce volume soit un hommage à Richard Bradley, sa force repose sur la variété et la portée des articles qui fournissent à de nombreux thèmes archéologiques familiers, de nouveaux renseignements, idées et interprétations. Ce volume prend comme base les thèmes archéologiques que Richard a développés au cours de sa carrière et a été divisé en plusieurs parties qui suivent, en gros, l'évolution chronologique de ses nombreux centres d'intérêt et portent des sous-titres qui renvoient à six de ses principaux ouvrages. Les articles sont donc, de ce fait, groupés en sections significatives qui donnent au contenu une vraie cohérence.

Les 'fondations sociales de la Grande-Bretagne préhistorique' sont posées dans la contribution de Mike Parker Pearson sur le Stonehenge néolithique et celle de Colin Richards et Julian Thomas sur le paysage de Stonehenge avant Stonehenge, toutes deux découlent du récent projet Stonehenge Riverside qui a ajouté beaucoup plus de possibles couches d'interprétation à ce paysage complexe; et par une discussion des petits monuments néolithiques le long de la haute vallée de la Tamise de Gill Hey, et, dans le nord du pays, des enceintes à chaussée empierrée et de leur cadre socio-économique dans le nord du Yorkshire de Jan Harding. Chacun examine une combinaison de données anciennes et nouvelles pour présenter une délibération entre paysage social et monumental. Martin Green présente de nouvelles et inhabituelles inhumations de Cranborne Chase. L'examen perspicace de l'archéologie économique de la transition âge du bronze - âge du fer en Grande-Bretagne de John Barrett et les commentaires d'Andrew Fleming sur l'archéologie du paysage et le concept, l'usage et l'abus du terme 'paysage' lui-même viennent compléter ces articles.

Deux articles examinent l'archéologie des lieux naturels, abordant la nature des forêts néolithiques. Bell et Noble discutent des écologies de ces forêts et des transformations écologiques tandis qu'Allen et Gardiner

examinent le concept de l'étendue de la forêt néolithique et notre présomption que le but des communautés préhistoriques était d'entreprendre des activités qui les faisaient disparaître afin d'exploiter les ressources et de placer des monuments dans un paysage ouvert. Ils soutiennent que, peut-être, c'était le fait qu'ils se trouvaient toujours à l'intérieur de la forêt qui était important.

La section sur le 'passage des armes' comprend un groupe varié d'articles. Heinrich Härke discute 'l'idéologie de la conquête' définie comme un état d'esprit et une gamme de pratiques reliées qui expliquent et justifient les conditions sociales et politiques actuelles avec une conquête réelle ou imaginée dans le passé. Il considère si on peut vraiment identifier l'existence ou l'expression d'un mythe ou d'une idéologie de la conquête par des moyens purement archéologiques, essentiellement par l'examen de comptes-rendus historiques de l'Angleterre anglo-saxonne et de possibles interprétations de l'adoption de tombes guerrières et la réutilisation de tertres funéraires préhistoriques. Woodward et Needham discutent des spécificités des rares mais exceptionnels artefacts d'un individu du début de l'âge du bronze inhumé à Wilsford, Wiltshire. Chris Gosden marie paysages et artefacts dans une approche éloquente et imaginative en identifiant deux différents cycles de changements dans l'âge du bronze et l'âge du fer britanniques liés à la création de paysages cultivés et à la réémergence de travail du métal ordinaire sous des formes plus élaborées et plus décoratives après sa disparition au début de l'âge du fer. Rosamund Cleal se tourne vers les pointes de flèches transversales du néolithique pour alimenter une discussion sur le moment et la nature de leur introduction tandis que Mark Edmunds considère la récente biographie des haches, le 'sens' qu'elles semblent encore dégager des milliers d'années après leur fabrication et les connotations symboliques qu'elles ont aussi bien pour les collectionneurs modernes, les conservateurs de musée et les découvreurs accidentels. Sheridan nous emmène à Kilmartin Glen, nous fournissant une histoire chronologique incisive de ce paysage monumental complexe entre le début du 4ème et le début du 1er millénaire av. J.-C. et le place dans l'histoire plus étendue des développements ailleurs en Ecosse occidentale et au delà.

'Rituel et vie domestique' commence avec

Ian Hodder sur le thème de l'écriture de l'histoire sur le site du début du Néolithique de Çatalhöyük, révélant comment on peut voir le procédé de construction de la mémoire dans divers projets matériels y compris la construction de maisons, l'inhumation et la récupération de crânes et les sculptures. Il argumente que l'organisation sociale sur le site était basée autour des 'maisons d'histoire', constituées de groupes de maisons centrées sur une maison centrale dans laquelle on inhumait de préférence les morts et où étaient rassemblés des marqueurs rituels et symboliques, menant à une stabilité sociale à long terme. Cela fait écho à la contribution d'Alasdair Whittle qui examine la relation entre les maisons en longueur et les tombes de la Linearbandkeramik. Il argumente que maison et tombe d'un cimetière étaient souvent des images interchangeables: tombe, ou tombe et corps, étant peut-être vus comme une maison tandis que la maison aurait pu être conceptualisée comme un corps. Howard Williams prolonge le thème de la mémoire et des concepts de mort avec une discussion de la mémorialisation des morts dans la Suède contemporaine, montrant comment les sillons de la mémoire créent un sentiment de nostalgie et d'ancienneté primordiale et comment les cendres sont utilisées pour créer divers liens entre vivants et morts.

Dans 'image et audience' les experts de Grande-Bretagne, Scandinavie et Afrique du Sud adoptent diverses approches de l'interprétation de l'art rupestre et son contexte. Joakim Goldhahn défie les distinctions conventionnelles entre les rares images d'art rupestre découvertes dans des contextes de tombes fermées et les trouvailles plus fréquentes d'art rupestre sur des affleurements rocheux dans la campagne de l'Europe du nord. Kaul, qui discute aussi l'art rupestre scandinave, défie de nouveau les récentes interprétations et illustre comment les représentations de bateaux pourraient refléter d'occasionnelles visites de voyageurs ou de contacts lointains ou d'expéditions. David Lewis-Williams fait le parallèle entre les travaux de Bradley sur l'art rupestre en Scandinavie et les siens sur l'art rupestre San dans l'Afrique du sud

montrant comment, dans les deux régions, les gens croyaient en un cosmos à trois niveaux qui servait de cadre aux croyances et rituels. Ramon Fábregas Valcarce et Carlos Rodríguez-Rellán révisent l'interprétation de l'art rupestre de Galicie comme un phénomène ouvert ou très peu restreint, attirant l'attention sur les contraintes physiques qui pesaient sur son observation et abordant plusieurs problèmes sujets à controverse entourant la datation de l'art pariétal de Galicie et sa relation précise avec la sphère domestique. Lara Bacelar Alves examine comment le legs de la recherche, paradigme de l'archéologie prévalente et de la science moderne ont modelé notre connaissance actuelle de l'art pariétal en Galicie et dans le nord-ouest du Portugal. Stan Beckensall examine les récents progrès dans les études de l'art pariétal en Grande-Bretagne, en révisant l'interprétation, le répertoire, les excavations, et les questions de théorie, ainsi que les problèmes de conservation. Finalement, dans cette section, Peter Skoglund considère la relation entre les peuples et les arbres tels qu'ils sont représentés dans l'art pariétal de l'âge du bronze scandinave et suggère que ces images dépeignent des arbres à feuilles caduques manipulés qui ne sont pas une description véridique des interactions entre peuples et arbres, mais plutôt de rituels dans lesquels la cueillette de feuilles formait un élément substantiel.

La dernière section 'changer la terre' commence avec l'examen de David Yates des possibles orientations cosmologiques des systèmes de champs de l'âge du bronze qui auraient pu être créés pour marier la terre et le ciel, tandis que Chris Evans nous invite à évaluer le cadre d'interprétation appliqué à des données de fouilles sous-estimées non seulement au niveau du site et de l'incident – l'archéologie financée par les promoteurs peut avoir facilité plus de répertoire mais a-t-elle fragmenté les archives? Le volume se conclut avec la surprenante histoire en images d'Aaron Watson qui décrit quatre sites différents et les différentes techniques et méthodes utilisées pour leur étude archéologique et l'interprétation du paysage.

Traduction Annie Pritchard  
16/02/12



## Zusammenfassung

### *Bild, Erinnerung und Monumentalität – archäologische Auseinandersetzungen mit der materiellen Welt: Eine Feier der akademischen Leistungen von Professor Richard Bradley*

Während dieser Band Richard Bradley gewidmet ist, liegt seine Stärke in der Vielfalt und Tiefe der Themen, die neue Informationen, Ideen und Interpretationen zu vielen vertrauten archäologischen Fragen unterbreiten. Die Grundlage des Bandes bilden die archäologischen Themen, die Richard im Laufe seiner wissenschaftlichen Laufbahn entwickelt hat; er ist unterteilt in verschiedene Sektionen, die grundsätzlich der chronologischen Entwicklung von Richards vielen Interessensfeldern folgen, und die nach sechs seiner wichtigsten Bücher benannt sind. So sind die Beiträge in sinnvolle Sektionen unterteilt, die den Inhalten eine echte Kohärenz geben.

Die „Social foundations of prehistoric Britain“ werden gelegt in den Beiträgen von Mike Parker Pearson zum neolithischen Stonehenge und von Colin Richards und Julian Thomas zur Landschaft von Stonehenge vor Stonehenge, die beide aus dem aktuellen Stonehenge Riverside Projekt resultieren, das zahlreiche weitere mögliche Interpretationsschichten zu dieser komplexen Landschaft hinzugefügt hat. Zu dieser Sektion gehören auch die Diskussion kleiner neolithischer Monumente im oberen Themsetal durch Gill Hey sowie Jan Hardings Diskussion von Henges im Norden des Landes, in North Yorkshire, und ihres sozioökonomischen Kontextes. Diese Beiträge untersuchen sowohl alte als auch neue Daten, um einen Diskurs zwischen monumentaler und sozialer Landschaft zu erfassen. Martin Green präsentiert einige neue und ungewöhnliche Bestattungen von Cranborne Chase. Diese Beiträge werden vervollständigt von John Barretts aufschlussreicher wirtschaftsarchäologischer Untersuchung des Übergangs von der Bronze- zur Eisenzeit in Britannien und Andrew Flemings Kommentar zur „Landschaftsarchäologie“ und zum Konzept, Gebrauch und Missbrauch schon allein des Begriffs „Landschaft“.

Die „Archaeology of natural places“ wird in zwei Artikeln untersucht, die sich der Natur neolithischer Waldlandschaften widmen. Bell und Noble diskutieren die Ökologie dieser

Waldlandschaften und von ökologischen Transformationen, während Allen und Gardiner der Frage nachgehen, wie neolithisches Waldland konzeptionell zu erfassen sei; sie erörtern unsere Annahme, dass das Ziel prähistorischer Gemeinschaften gewesen sei, Handlungen auszuführen, die das Waldland zurückdrängen, um Ressourcen auszunutzen und Monumente in eine offene Landschaft platzieren zu können. Sie kommen zu dem Schluss, dass es vielleicht die Tatsache war, dass sie noch immer innerhalb von Waldland waren, die von Bedeutung war.

Die Sektion über die „Passage of arms“ umfasst eine vielfältige Gruppe von Beiträgen. Heinrich Härke diskutiert die „Eroberungs-ideologie“, die definiert sei als eine Geisteshaltung und eine Reihe zugehöriger Handlungen, die gegenwärtige soziale und politische Zustände zu erklären versuchen mittels realer oder imaginierter Eroberungen in der Vergangenheit. Er überlegt, ob die Existenz und Umsetzung einer Eroberungsmythologie oder -ideologie tatsächlich allein auf archäologischem Weg erkannt werden kann, insbesondere in der Untersuchung historischer Quellen zum angelsächsischen England und möglicher Interpretationen der Übernahme von Kriegergräbern und der Wiedernutzung prähistorischer Grabhügel. Woodward und Needham diskutieren die Besonderheiten der wenigen und außergewöhnlichen Artefakte eines frühbronzezeitlichen Individuums, das bei Wilsford, Wiltshire, bestattet wurde. Chris Gosden vereint Landschaft und Artefakte in einem eloquenten und ideenreichen Ansatz, in dem er zwei verschiedene Wandlungszyklen in der britischen Bronzezeit und Eisenzeit identifiziert, die zusammenhängen mit der Entstehung bewirtschafteter Landschaften und dem Wiedererscheinen „alltäglicher“ Metallobjekte in elaborierteren und dekorativeren Formen, nachdem diese in der frühen Eisenzeit verschwunden waren. Rosamund Cleal wendet sich den querschneidigen neolithischen Pfeilspitzen und der Frage nach Art und Zeitablauf ihrer Einführung zu, während sich Mark Edmunds mit der jüngeren Biographie von Äxten befasst, die noch tausende von Jahren nach ihrer Herstellung gewisse „Bedeutungen“ zu übermitteln scheinen, und mit den symbolischen Referenzen, die sie für heutige Sammler, Museumskuratoren und Zufallsfinder gleichermaßen haben. Sheridan nimmt uns mit zum Kilmartin Glen in seinem prägnanten chronologischen Bericht aus dieser

evokativen und komplexen monumentalen Landschaft zwischen dem frühen 4. und frühen 1. Jahrtausend BC, den er mit Bezug auf die allgemeinere Geschichte der Entwicklungen im westlichen Schottland und darüber hinaus situiert.

“Ritual and domestic life” beginnt mit Ian Hodders Abhandlung der Entstehung von Geschichte in der frühneolithischen Siedlung von Çatal Höyük, in der er verdeutlicht, wie sich der Prozess der Erinnerungsbildung niederschlägt in unterschiedlichen materiellen Projekten wie Hausbau, Bestattung und dem Wiederfinden von Schädeln und Skulpturen. Er argumentiert, dass die Sozialorganisation in Çatal Höyük auf „Geschichtshäusern“ basierte, die aus Häusergruppen bestanden mit einem Zentralhaus in der Mitte, in dem die Toten vorzugsweise bestattet wurden und sich rituelle und symbolische Kennzeichen konzentrierten, was zu langdauernder sozialer Stabilität führte. Dies findet Parallelen in Alasdair Whittle’s Beitrag, in dem er die Beziehungen zwischen den Langhäusern und Gräbern der Linearbandkeramik untersucht. Er argumentiert, dass Haus und Grab oft wechselseitig austauschbare Bilder darstellten: Grab bzw. Grab und Körper wurden vielleicht als Haus gesehen während das Haus als Körper konzeptualisiert worden sein kann. Howard Williams dehnt das Thema Erinnerung und Konzepte des Todes aus in seiner Diskussion des Memorierens der Toten im heutigen Schweden, wobei er zeigt, wie Gedenkhaine ein Gefühl von Nostalgie und Vorzeitlichkeit erzeugen und wie Asche benutzt wird um unterschiedliche Verbindungen zwischen Lebenden und Toten zu erzeugen.

In „Image and audience“ interpretieren Forscher aus Großbritannien, Skandinavien und Südafrika Felsbilder und ihre Kontexte auf unterschiedliche Weisen. Joakim Goldhahn stellt konventionelle Unterscheidungen zwischen den seltenen bildlichen Darstellungen innerhalb geschlossener Bestattungen und den häufigeren Felsbildern in der offenen Landschaft in Nordeuropa in Frage. Kaul, der ebenfalls skandinavische Felsbilder diskutiert, stellt zudem gegenwärtige Interpretationen in Frage und beleuchtet, wie Schiffsbilder gelegentliche Besuche von Reisenden oder Fernkontakte oder Expeditionen reflektieren könnten. David Lewis-Williams zieht Parallelen zwischen Bradleys Bearbeitung der skandinavischen Felsbildkunst und seiner eigenen Arbeit zur

Felsbildkunst der San im südlichen Afrika; er zeigt, dass Menschen in beiden Regionen an einen dreistufigen Kosmos glaubten, der den Rahmen für Glaubensvorstellungen und Rituale bildete. Ramon Fábregas Valcarce und Carlos Rodríguez-Rellán betrachten bisherige Interpretationen galizischer Felsbilder als offenes oder kaum begrenztes Phänomen und lenken die Aufmerksamkeit auf die physischen Einschränkungen, die für ihre Wahrnehmung existierten; sie sprechen dabei mehrere umstrittene Fragen in Bezug auf die Datierung der galizischen Felsbildkunst und ihrer Beziehung zur häuslichen Sphäre an. Lara Bacelar Alves untersucht, wie Forschungsgeschichte, Paradigmen der Mainstream-Archäologie und moderne Naturwissenschaften die gegenwärtige Kenntnis von Felsbildern in Galizien und Nordwestportugal geprägt haben. Stan Beckensall untersucht gegenwärtige Ansätze der Felsbildstudien in Großbritannien und blickt zurück auf die Interpretation, Dokumentation und Ausgrabung von Felsbildern und damit verknüpfte Fragen der Theorie und der Konservierung. Schließlich erörtert Peter Skoglund in dieser Sektion die Beziehungen zwischen Menschen und Bäumen, wie sie in bronzezeitlichen Felsbildern Skandinaviens dargestellt werden, und schlägt vor, dass diese Bilder manipulierte laubabwerfende Bäume zeigen und keine lebensgetreue Beschreibung der Interaktionen von Menschen mit Bäumen sind, sondern vielmehr Rituale präsentieren, in denen das Sammeln von Blättern ein substantielles Element war.

Die letzte Sektion, „Altering the earth“, beginnt mit David Yates’ Untersuchung der möglichen kosmologischen Ausrichtung bronzezeitlicher Flursysteme, die so angeordnet worden sein könnten, dass sie die Erde mit dem Himmel vermählen, während uns Chris Evans einlädt, den Interpretationsrahmen zu begutachten, der auf unterbewertete Grabungsdaten angewandt wird, über den Fall des einzelnen Fundplatzes und des Einzelereignisses hinaus: verursacherfinanzierte Grabungen erleichtern vielleicht die ausführlichere Dokumentation, aber haben sie zu einer Fragmentierung der Daten geführt? Der Band schließt mit Aaron Watsons bemerkenswerter bildhafter Erzählung von vier verschiedenen Fundorten und den unterschiedlichen Techniken und Methoden, die in ihrer archäologischen Erforschung und der Interpretation ihrer Landschaft angewandt wurden.

# ACKNOWLEDGEMENTS

Producing this volume has been a pleasurable task, not least because of the commitment shown by the contributors and their perseverance in providing text to a tight timetable during often taxing times. The choice of who to invite was not an easy one – the intention was to provide a balance of contributions from Richard's former students, colleagues, research collaborators, and peers within the discipline. We wish that many more contributions could have been solicited, and we apologise to those (including very senior figures) we have had to exclude, but the end product of an open invite would have been a volume half a metre thick. What is presented is very much an exercise in sampling rather than 'total archaeology'.

We would like to thank the Prehistoric Society for agreeing to publish this volume as part of their Research Papers series. We also thank Professor Tim Champion for balanced overview and apposite comments together with members of the Society's editorial

advisory committee and a number of referees who made pertinent comments enabling a number of papers to be improved.

The Prehistoric Society is grateful for a number of financial contributions towards the publication of this volume; the fact that so many institutions were happy to contribute to this volume (at relatively short notice) is a tribute to the respect with which they and their archaeologists hold Richard. Contributions were gratefully received from: University of Reading (Department of Archaeology), University of Chester (Department of History and Archaeology), Southampton University (Archaeology), Stanford University (Stanford Archaeology Centre), Lithic Studies Society, National Museums of Scotland, Society of Antiquaries of Scotland, Cambridge Archaeological Unit, Neolithic Studies Group, and the Institute for Archaeologists. Once again the Society is indebted to Oxbow, in particular our editor Claire Litt, and typesetter Julie Blackmore.

# PREFACE: RICHARD BRADLEY

*Andrew Meirion Jones and Joshua Pollard*

With considerable, perhaps calculated, understatement, his University of Reading website entry reads: ‘Professor Richard Bradley teaches prehistoric archaeology and has written a number of books on the subject’. There is a veil of modesty here that hides a remarkable career of academic achievement, and one which continues to gain momentum. It is difficult to imagine how the study of British and European prehistory would look without Richard’s stellar contribution, which has been remarkable for its range, depth, and interpretive insight. We can be sure that if Richard had taken a different disciplinary path, archaeology, and especially that brand of theoretically-informed later prehistory which has lain at the forefront of an Anglo-Scandinavian tradition over the last three decades, would have been considerably worse off. The papers presented here are intended to mark Richard’s achievement to date, and to display the debt felt by many for his disciplinary contribution, academic friendship, and support.

It is difficult to know where to begin charting Richard’s impact. Reference to his numerous books and papers – a standard measure of academic achievement – provides one route in. Statistics might provide another story. Using a readily-available but clearly highly inaccurate piece of citation software, Richard is listed as having 167 publications, generating 117.05 citations per year, 29.44 citations per publication, and possessing an h-index of 30. So much for the vagaries of web-based sampling – like his Reading webpage entry, those figures are downplaying the story. What matters is that whatever he produces, counts; that he has supported two or three generations of young archaeologists on their journey into the subject; that through

his work he has stimulated debate and shaped the direction of prehistoric studies; and that he has provided a model for others to follow. His archaeology has always worked supremely well, being guided by theory, but not being slavish to it, being driven by questions that stem from the archaeology itself, and delivering insight with an admirable erudition and clarity.

A healthy balance between theory and practice, and a deep interest in the relationship between the two, has certainly characterised Richard’s work (see Bradley 2003; 2006a). Fieldwork has always featured in his research. He was one of the founder members of the Institute of Archaeologists. He has been much concerned by the relationship between the academic and commercial arms of the discipline (Bradley 2006b), and the way that archaeology in Britain and Continental Europe manages an increasing mountain of information locked in so-called ‘grey literature’ (Bradley *et al.* 2012). A streak of methodological innovation can be detected in much of this work, from devising sampling strategies for ploughsoil and buried soil deposits at Belle Tout, Sussex (Bradley 1970), and on Cranborne Chase (Bradley 1987), to sieving for soil marks on the Oxfordshire gravels (Bradley & Fisher 1984).

Richard’s fieldwork has taken him on a journey from southern England (notably Sussex, Cranborne Chase, the Berkshire Downs and Thames gravels), to Scandinavia and Iberia. Over the last decade and a half he has conducted fieldwork on a range of Early Bronze Age monuments in Scotland, here encouraged by the more enlightened support for research excavation that is offered by organisations such as Historic Scotland in comparison to heritage agencies south of the Border. The breadth of his regional

research interests are remarkable: there are few other archaeologists of his standing who have recently undertaken research in places as far afield as Staffordshire, Aberdeenshire and Småland, Sweden; and consistently seen that fieldwork through to full and prompt publication.

There is another side to Richard well known to many, and that is as a source of seemingly endless anecdotes. Not that their generation is itself anecdotal, for they tell of the humanity of the man, and explain at least in part of his engaging personality and influence. A sense of this is provided by the short pieces by Bob Chapman and Susan Alcock at the start of the volume. Here, as editors, we offer personal reminiscences of 'first encounters'.

### First encounters 1 (AMJ)

In many ways this festschrift repays a debt of gratitude to Richard. Picture the scene. Sometime in the mid-1990s, Hannah and I stood in the car park at Balnuran of Clava having peacefully thought we had arranged to dig with Richard on his project. Eventually, after some hours, a Reading minibus pulls up and a flustered Richard jumps out; it transpired that the message I'd communicated to him via my PhD supervisor, Colin Richards, had failed to be transmitted. He was not expecting us. However we were welcomed onto the project, given a trench to ourselves to excavate on the South-West cairn, and provided with food and encouragement. There are few projects where you turn up unexpectedly, are welcomed onto the project, and find yourself ending up one of the authors of the final monograph report. Friendship with Richard began on this occasion, but was cemented once we had got over the small matter of him examining my PhD thesis. His encouragement both on the project, and after the examination, was all the more important for an ambitious young student struggling in an indifferent academic environment, with an (by his own admission) apathetic PhD supervisor. His encouragement is largely the reason I remain(ed) in archaeology.

### First encounters 2 (JP)

My initial encounters with Richard were indirect, hearing him deliver papers at

conferences while I was an undergraduate. The first was a Lithics Studies Society conference in Cardiff in 1988, when he described, among other things, the airborne activities of Julian Thomas' waterproof trousers while conducting fieldwork at Great Langdale. I think the next was a Prehistoric Society day conference on the prehistory of the Thames Valley. Richard had lost his voice, but this was not going to stop him delivering his paper! If I remember correctly, he co-opted David Miles and croaked words into his ear, which were then relayed by David at higher volume. Occasionally there would be a mishearing or misunderstanding, and Richard would wave his arms in a correcting fashion and croak louder. The effect was memorable.

I was lucky in that Richard agreed to act as external examiner for my PhD. The viva was delayed by two nerve-racking hours because the train he was travelling in became stuck in the Severn Tunnel (a case of Bradley extended agency, perhaps), but his approach once at the viva instantly put me at ease. His support since – particularly in supplying wonderful references, and in reminding me about what matters in academic life – remains much valued.

### Publications

Putting together this edited volume offered the editors an opportunity to reflect on which of Richard's books they found most useful or interesting. We will discuss these here.

#### *An Archaeology of Natural Places and The Passage of Arms* (AMJ)

One of the books that struck me with a palpable intellectual force was *An Archaeology of Natural Places*. I can still remember reading the manuscript version of this book while digging with Richard at Tomnaverie in Aberdeenshire. Richard had given me the manuscript to read, and it was difficult to put down even after a tiring day's digging in snow and ice. Reading this was a eureka moment in which it suddenly became clear that we are not confined to discussing hard-edged classes of archaeological monuments, nor are we confined to solely thinking about their location in the landscape (as was currently fashionable in the late 1990s), in fact we need to think about the very stuff of which they are composed, the natural environment. Interestingly this book seems to act as a keystone to Richard's thought, it brings



together his work on monuments, rock art, stone axes and artefact deposition. Each of these is brought together and made sense of in relation to the cohesive discussion of their relationship to the natural environment. The book also seems to be a significant development from the equally pioneering *Altering the Earth*. That earlier book started a discussion around the processes of monument construction in the Neolithic and the significance of acts of manipulation and alteration. *An Archaeology of Natural Places* gives this argument more weight, and discusses the significance of materials not only for the Neolithic, but for later prehistory. *An Archaeology of Natural Places* gave much needed archaeological flesh to the theoretical bare-bones of the phenomenological debate. It also presages current debates around relationality, ontology and animism.

Having said this, the book I really admire is *The Passage of Arms*. What attracts me to this book is that it is the result of an incisive and intelligent overview of the data slavishly collected by colleagues across Europe over the past few decades. It makes sense of an archaeological observation – that artefacts appear to be deliberately deposited – and considers this over a considerable time span. In that sense it offers that much discussed (but little practised) long chronological view of changing practices, and significantly makes sense of a variety of different practices. Importantly it is not simply a book that applies anthropological or sociological theory to a body of archaeological data. Instead it is one of those rare books that arises from an archaeological observation which contributes something to the wider debate about social practices in the humanities and social sciences; it is quintessentially an archaeological analysis, and could only have been written by an archaeologist. More important, it is one of those books that – once written – seem part of the fabric of our disciplinary thought. I find it difficult to imagine how we would interpret archaeological deposits without the insights contained within this book.

### ***The Social Foundations of Prehistoric Britain (JP)***

The first of Richard's books I encountered was his *Social Foundations of Prehistoric Britain* (published 1984). It was unlike anything else I had read at that stage (here beginning

undergraduate study at Cardiff). Even if the content now looks dated, it still remains a very powerful exercise in defining a social archaeology, and remains one of the few works to apply a defined set of theoretically-driven perspectives to the full course of British later prehistory. The book is Richard's reaction to the perceived reductionism of the economic archaeology of the 1970s and early 1980s, and exudes an ambitious confidence in the interpretive potential of archaeology, beginning with a strong critique of Christopher Hawkes' and M.A. Smith's observations on inferential limits. That capacity for confidence in the accounts that archaeology can offer of the prehistoric past must remain central to the project of the discipline. Inspired if indirectly by Marxist theory, the theme of how forms of power emerged and were reproduced through relations of production and knowledge control was a popular one during the early days of post-processualism. While easily critiqued, they still carry weight, and it is curious that in more recent years British prehistorians have tended to shy away from engaging with the intricate web of social relations, power-play and economic practice that defined so much of life. The challenge needs to be taken up again, but in a way that weaves in the strands of current interest in materiality, relationality and ontology to produce a new, hybrid, social archaeology.

### **Social Prehistories**

The title of this foreword alludes to Richard as a social prehistorian. We feel that it is important to explain that concept here. The concept of the social has undergone various leaps and bounds since its first use by British prehistorians (eg, Renfrew 1973). Renfrew's first emphatic formulation of the concept treated prehistoric societies as socio-cultural systems made up of multiple components, the organisational principles of which affected the patterns of material culture excavated by archaeologists. The term was readily adopted by a later generation of archaeologists who sought to investigate how material symbols played a part in structuring society (eg, Hodder 1990). It is this second definition that eventually led to the establishment of a journal devoted to social archaeology. The very term 'social' has undergone recent re-evaluation in sociology



and science studies. In this volume we wish to lay this debate to one side and argue for the value of a social prehistory, an archaeology that gives equal weight to the social and material dimensions of the past, which examines how the material and social articulate and are embedded in each other: an account that examines past human relationships and how these are mediated in and through the material environment; an account that offers an understanding of the changing nature of past social relationships and their material forms. It is these kinds of accounts that are exemplified by essays in this collection, which offer a rich understanding of the changing nature of human societies from the Neolithic to Iron Age and medieval periods. These kinds of account are exemplified by the work of Richard Bradley. It is a measure of Richard's instinct, understanding, and passion for later prehistory that his archaeological accounts have transcended the theoretical dogmas of the past couple of decades; his concern is for a greater understanding of the archaeology, rather than being theoretically 'correct' or fashionable.

### A social prehistorian

There is another sense in which we use the word *social* here: to discuss Richard as a social persona. All who know Richard are aware of his boundless energy and enthusiasm for archaeology and archaeologists, and his ability to communicate stories and archaeological news. Those first encounters both editors had with Richard were to set the mould. Both of us can recall long conversations, often over lunch, when Richard availed us of the latest archaeological news from across Europe, often from across the world. One of the things that marks Richard out is his sociality, his position as a good humoured communicator of archaeological knowledge. There are many times when the editors have met up with Richard and have left his company, entertained (very important), but also availed of all the latest discoveries, archaeological appointments, potential appointments and the like; brains buzzing. In the parlance of recent theoretical discussions, in many ways we can consider Richard as a critically important actant, a node in a network of knowledge; useful knowledge being communicated by

anecdote or gossip. All relevant archaeological knowledge flows through him. We are reminded of Sherlock Holmes' remarks about his brother Mycroft in the *Bruce-Partington plans*: 'all other men are specialists, but his specialism is omniscience' (Conan-Doyle 1917, 85). We may think of Richard Bradley as the Mycroft of European prehistory. This aspect of Richard's persona is critically significant: he is able to evaluate, cogitate and synthesise archaeological knowledge from across a number of fields or sub-disciplines, and a series of different regions across Europe (as witnessed by the range of contributors to this volume).

Critically, as an actant Richard also makes things happen, his passion for the discipline of archaeology has led him to write references, edit books, organise workshops with and for up-and-coming junior colleagues, and generally enthuse to those in the know. This account of Richard Bradley as an actant, a social person through which knowledge flows and is evaluated, and as a person who makes things happen may seem flippant. It is not intended in this way. Of course, we emphasise his ability to evaluate and synthesise as of fundamental importance to the discipline of prehistoric archaeology. However we also want to argue that this model of sociality offers an important means of thinking around the question of prehistoric societies; we can consider societies to be composed of individual actants, evaluating and working with the materials at hand. It is this that helps to propagate and reproduce prehistoric societies.

We have established that Richard's field is omniscience. His range of interests is expansive and diverse. We have also argued that he makes things happen. One of the things that he makes happen is to spark interest in new debates or areas of study. Here various contributors focus on some of these interests and debates.

Festschrift volumes are often written as summaries of the careers of distinguished academics. We are aware of the alarm this idea will cause Richard, with its suggestion of the end of a career. Instead, our intention in putting this volume together is to 'take stock' of Richard's work to date, and to offer thanks for his enthusiasm, insight and companionship over the years. We certainly do not expect this volume to mark the end of his career. On the contrary, we are aware of a number of field projects he has planned for the future, and it is evident from even the most cursory view of his recent output

that he continues to be more than research active. Richard's dislike of bureaucracy is both justified and well-known. Is it possible that the increasing levels of University bureaucracy have acted as a counterweight on his research activities over the years? In fact, when, and if, Richard retires from his post at Reading, it is entirely possible that his research output will increase by leaps and bounds. In that sense it is likely that this volume will simply chart the tip of the iceberg.

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# EDITORS' INTRODUCTION

The title of this volume, *Image, Memory and Monumentality*, reflects the varied research interests of Richard Bradley. Here we wish to introduce these themes, and the prospectus of the volume, in more detail.

## *Image*

We discuss imagery here, but our title largely alludes to rock art. The study of rock art in the British Isles has, for much of the 20th century, been neglected by academic archaeologists. The fact that this has changed in the last twenty years is due in no small part to the work of Richard Bradley on the cup-and-ring motifs of Atlantic rock art in Britain and the Iberian peninsula (Bradley 1997). This change of focus has seen a renewed interest in rock art studies in Britain, with a growing number of books and papers dedicated to the subject. One of the important innovations heralded by Bradley's analysis was discussing rock art as a component of landscape archaeology. In addition to a landscape approach Bradley was also interested in the symbolic and communicative aspects of rock art. These twin methods of analysis resonated with rock art researchers throughout Europe, as is reflected in the contribution by Scandinavian rock art researchers Joakim Goldhahn, Flemming Kaul, and Peter Skoglund. Each deal with aspects of these approaches in relation to the Bronze Age rock art of southern Sweden and Norway. Similarly contributions by Iberian researchers, Lara Bacelar Alves, and Ramón Fábregas Valcarce and Carlos Rodríguez-Rellán each provide an overview and analysis of the ways in which these approaches have affected the study of petroglyphs in the Iberian peninsula, a region with a complex set of rock art styles, in which issues of

chronology and relationship are still very much open to question. During the late 1980s and 1990s a bold new theory transformed much rock art scholarship, and much rock art was attributed to the work of ritual practitioners or specialists who encountered and produced the art under altered states of consciousness. Bradley's work was key to debate in this area, and he argued that the passage tomb art of Ireland might be attributed to such altered states of consciousness (Bradley 1989). This interpretative paradigm has been developed by David Lewis-Williams in the context of South African bushmen rock art, and his contribution here considers the parallels between this and southern Scandinavian rock art cosmologies.

While Richard Bradley's work on rock art in the British Isles situated the study of petroglyphs firmly in academic archaeology in fact the study of rock art has been pursued for many decades by amateur archaeologists; Stan Beckensall's studies of rock art in northern England have importantly led the way amongst the amateur community. Bradley's collaboration with Stan is discussed here in his reflection. Archaeology in Britain is both a professional and amateur pursuit, and one of the key aspects of Bradley's work has been to collaborate in a series of different regional contexts with local amateur archaeologists. Again Martin Green's contribution reflects this for the southern chalkland landscape of Cranborne Chase. Both of these contributions lead us to consider the second theme of this volume: memory.

## *Memory*

In a sense this entire volume is an embodiment of memory, as reflected by the introductory contributions by Richard Bradley's colleagues and former colleagues, Bob Chapman and

Sue Alcock. However, the topic of memory has grown in significance over the past decade and a half, in no small part due to the intellectual impetus of Richard Bradley (see Bradley & Williams 1998; Bradley 2002). In particular Bradley has emphasised the specifically material character of memory, and discussed how archaeologists may study this aspect of human memory work. He has focused especially on what has come to be known as 'the past in the past'; the way in which past societies encountered and thought about the past, and how the resources of past material culture were worked into the projects of the present. This is reflected in the historical contributions in this volume from Howard Williams and Heinrich Härke; it is also evident in Mark Edmonds' discussion of the afterlife of polished stone and flint axes.

The concept of memory as a connective material practice has been emphasised in recent years, by various authors including the editors. Here the focus has been on memory as a process; a process undertaken with, and through materials. Rather than simply thinking of monuments and artefacts as embodying memory due to their material form and character recent writers have been concerned with how materials impinge upon human projects of memory making or memory work; for example Ian Hodder's discussion of houses as vehicles for history making in Neolithic Turkey and Alasdair Whittle's discussion of the *Linerbandkeramik* house and cemetery as part of the work or process of community establishment in Neolithic Central Europe. Memory also appears as the background to the final theme of this volume: monumentality.

### **Monumentality**

We now arrive at the third theme of this volume. Again this is a topic that the work of Richard Bradley has done much to illuminate. In a sense his discussion of monumentality was possibly the prime impetus for much of the intellectual work to follow. Monumentality quite naturally leads to a discussion of memory; likewise the discussion of rock art as a relatively ephemeral activity can be quite easily juxtaposed with the more impressive work of monumental construction in prehistory. If we are going to emphasise monument construction then

how are we to consider the ephemeral or repetitive act? Here we see obvious connections to Bradley's work on both deposition and prehistoric imagery. This intellectual enquiry is taken up in particular by Chris Gosden, as he asks how understanding of the organised field systems of the later prehistoric sequence in Britain differs from that of the metalwork that is contemporary with them. It is also the subject of Gill Hey's contribution discussing the role of the smaller, less impressive monuments of the Thames valley region.

Bradley's work on monuments has, above all, highlighted their significance (Bradley 1998), as he enquired into the role of monuments in the transition to agriculture (Bradley 1993). Another theme is the relationship between monuments and the natural world (Bradley 2000). The latter topics are the focus of two contributions here by Mike Allen and Julie Gardiner, and Martin Bell and Gordon Noble. The role of monuments as been the particular focus of recent projects at Stonehenge, notably the work of the Stonehenge Riverside Project; here the relationship between this iconic monument and its (much) wider landscape is a key research question. This is discussed in two contributions within this volume by Mike Parker Pearson, and Colin Richards and Julian Thomas.

One final strand that we have so far not discussed are social studies of later prehistory, this again is an important early focus of Richard Bradley's scholarship (Bradley 1984). The importance of a social analysis of prehistory is exemplified by John Barrett's overview of changing accounts of later Bronze Age and Iron Age Britain. It is also evident in Dave Yates' discussion of field systems, and Andrew Fleming's review of approaches to landscape archaeology. Alison Sheridan's discussion of the changing face of the Kilmartin region of Scotland also incorporates a sense of the social impetus of migration, population movement and cultural change. This introduction has far from exhausted all of the themes of this volume. As with all multiple authored volumes with a variety of themes we find that the contributions are thematically cross-cutting, and many contributions discuss several of these topics and more. Enjoy.

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# *TABULA GRATULATORIA*

## **For Richard**

In publishing this volume, the Prehistoric Society congratulates Richard, our 2012 Europa Prize winner, on his contribution to many aspects of prehistoric archaeology: theoretical, practical and interpretational. His work and his teaching have been inspirational to the discipline as a whole and, in particular, to several generations of students, many of whom have gone on to make their own contribution. It was presented to him at the Europa day-conference on 9 June 2012, at Reading University.

The following wish to join us in congratulating Richard, and in celebrating his contribution to archaeology (so far).

Jonathan Adams	Bob Chapman	Harry Fokkens	Peter Hinton
Susan Alcock	John Chapman	Robert Foley	Ian Hodder
Mike Allen	Daphne Charles	David Fontijn	Daniela Hofmann
Timothy Ambrose	Amanda Clarke	Ben M. Ford	Robert Hosfield
Hugo Anderson-Whymark	David Clarke	Steve Ford	Rupert Housley
Anders Andrén	Rosamund M.J. Cleal	Chris Fowler	Fraser Hunter
Bettina Arnold	Kerri Cleary	Shannon M. Fraser	Henry Hurst
Grenville Astill	Andrew Cochran	Charly French	Liz James
Lara Bacelar Alves	Stephen Cogbill	Mike Fulford	Robert Johnston
Joanna Bacon	Bryony Coles	Vince Gaffney	Andrew Meirion Jones
Alistair J. Barclay	John Coles	Julie Gardiner	Andy M. Jones
Graeme Barker	Gabriel Cooney	Duncan Garrow	Carleton Jones
John C. Barrett	Mark Corney	Paul Garwood	Martin Jones
Olaf Bayer	Trevor Cowie	Bisserka Gaydarsk	Flemming Kaul
Stan Beckensall	John Cruse	Henry Gent	Christopher Kerns
Martin Bell	Barry Cunliffe	Alex Gibson	Graeme Kirkham
Stefan Bergh	Neil Curtis	Catriona Gibson	Kristian Kristiansen
Knut Andreas Bergsvik	Tim Darvill	Roberta Gilchrist	George Lambrick
Wayne Bennett	David Dashwood	Annelou van Gijn	Alex Lang
Ana Bettencourt	John Davies	Joakim Goldhahn	Lars Larsson
Bill Bevan	Clare Dean	Chris Gosden	Jonathan Last
Robert Bewley	Claire Dennard	Martin Green	Jim Leary
Penny Bickle	Ross Dickinson	Frances Griffith	Mary Lewis
Ed Blinkhorn	Jane Downes	Reuben Grima	J.D. Lewis-Williams
Jean Bourgeois	Dave Dunkin	Adam Gwilt	Sue Lobb
Mark Bowden	David M.J. Durkin	Mark Anthony Hall	Trond Lødøen
Kenny Brophy	Hella Eckardt	Jan Harding	Leendert Louwe Kooijmans
Lisa Brown	Mark Edmonds	Heinrich Härke	Pam Lowther
Joanna Brück	Kevin Edwards	Colin Haselgrove	Gavin Lucas
Richard Brunning	George Eogan	Veryan Heal	Julie Lund
Mary Cahill	Christopher Evans	Frances Healy	Sara Lunt
Gilly Carr	Ramón Fábregas Valcarce	Knut Helskog	Frances Lynch
Martin Carver	Andrew Fitzpatrick	Gill Hey	Gavin MacGregor
Paul Chadwick	Andrew Fleming	Mike Heyworth	Ann MacSween
Tim Champion	David Field	Catherine Hills	David McOmish



Gro Mandt	Colin Richards	Justine Tracey
Lorraine Mephram	Julian Richards	Elizabeth Shee Twohig
David Miles	Stephen Rippon	Marc Vander Linden
Roger Mercer	Anna Ritchie	Xosé Ignacio Vilaseco Vásquez
Nicky Milner	Emilio Rodríguez-Alvarez	Mara Vejby
Steven Mithen	Carlos Rodríguez-Rellán	Blaise Vyner
Tom Moore	Alice Rogers	John Waddell
Gundula Müldner	Peter Rowley-Conwy	Geoff Wainwright
David Mullin	Clive Ruggles	Graeme Warren
Jane Murray	Mark Sapwell	Aaron Watson
Reggie Naled	Alan Saville	Matilda Webb
Ronald Naled	Chris Scarre	Leo Webley
Stuart Needham	Heather Sebire	Adam Welfare
Per Nilsson	Kate Sharpe	Caroline Wells
Courtney Nimura	Kirstie Shedden	Alasdair Whittle
Gordon Noble	Colin Shell	Caroline Wickham-Jones
Jacqueline Nowakowski	Lekky Shepherd	Eileen Wilkes
William O'Brien	Alison Sheridan	Neil Wilkin
Brendan O'Connor	Fabio Silva	Howard Williams
Deborah Olausson	Peter Skoglund	Ann Woodward
Mike Parker Pearson	Jessica Smyth	David Yates
Edgar Peltenburg	Nick Snashall	Rebecca Younger
Tim Phillips	Joanna Sofaer	
Hélène Pioffet	Marie Louise Stig Sørensen	Allen Environmental Archaeology
Mike Pitts	Fay Stevens	The British Museum (Prehistory and Europe Department)
Joshua Pollard	Peter Style	Cambridge Archaeological Unit, University of Cambridge
Christopher Prescott	Robin Taylor	National Museums of Scotland
Francis Pryor	Julian Thomas	University of Chester (History & Archaeology)
Henrietta Quinnell	Roger Thomas	University of Reading (Department of Archaeology)
Clare Randall	Carolyn Thorp	University of Southampton (Archaeology)
Keith Ray	Jane Timby	Stanford Archaeology Center, Stanford University, USA
Malcolm L. Reid	Martin Tingle	Society of Antiquaries of Scotland
Colin Renfrew		

# Richard Bradley: the man on the other side of the wall

*Bob Chapman*

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In late 1969 I went to see my tutor David Clarke in Peterhouse, Cambridge. On entering the room, I was greeted by the sight of David and (as I seem to remember) a scarecrow like individual engrossed in animated talk on sherds of Beaker pottery from a site at Belle Tout on the south coast. David's enthusiasm for the site led me to invite Richard (for it was he) to give a talk on Belle Tout (Bradley 1970) to the students' Archaeological Field Club during the following year. Not only did he come, but he brought a friend with him. We had, on occasions, welcomed speakers bringing friends along to these talks (including a well-known Roman archaeologist with a female companion who had just walked out on her author husband), but never before a friend whose occupation was a grave digger! In 1971 I went to a conference on *The Explanation of Culture Change*, organised by Colin Renfrew in Sheffield (Renfrew 1973), walked into the non-speakers room, with its close circuit television, and there was Richard again. We spent three memorable days discussing all aspects of archaeology, perfecting impersonations of senior members of the profession, and revelling (in more than one sense of the word) in participant observation of the assembled archaeologists. I remember him telling me that he had recently

been appointed as a lecturer at the University of Reading, but that he was already looking to move to a more established centre for archaeology. We next met when Reading advertised a Lectureship in Later Prehistory in 1976 (Mike Fulford having been appointed in the meantime to a Lectureship in Roman Archaeology in 1974, and Grenville Astill joining us later in 1978) and I was lucky enough to secure the position.

Since 1976 I have worked with Richard in the Department of Archaeology at Reading (for at least twenty years either next door or across the corridor), designed and taught modules with him, attended conferences together, visited his excavations and travelled with him to Wales, Northumberland, North America, Ireland, Denmark and Portugal. As such I have seen him in many different habitats, but his essential characteristics and qualities remain the same. This is a man who is absorbed by archaeology. He devours new publications, either over coffee in Blackwells or in his second home in the Sackler Library in Oxford. Often he can be seen through the window of his door in the department in Reading working his way through the latest publication that has arrived in the mail: whether he sustains his concentration or gives

way to a post lunch ‘siesta’ is usually a good indication of the stimulus of the publication. When he is in the department he is consumed with desire to share the latest news (of sites) and gossip (of people) with his colleagues and to learn of their own activities. On many occasions, and especially when there are new radiocarbon dates from his excavations, he may impart the same news to the same colleague on more than one occasion, whether on the same, or consecutive, days. When he used to teach undergraduates, before subject reviews and the full assault of audit culture on higher education, his classes were occasions for the sharing of ideas, not the delivery of core knowledge or transferable skills. When engaged in fieldwork, he is equally absorbed, noting every detail of a monument and its situation, noticing problems with interpretations, and sharing the wider implications of a particular site (whether it be his own or not) with accompanying colleagues and students.

Such absorption has left Richard with no mental time or space for the daily world of meetings and administration in the university. There is always a sense of his impatience and frustration that administration cannot be accomplished in a matter of minutes rather than hours. I imagine him wondering how it could possibly be the case that module description forms take up the time that could be used for having ideas. He will not thank me for this, but there is almost a sense of him being a ‘throwback’ to the days of people like Stuart Piggott, who was known to use his wastepaper basket for ‘filing’ university memos. Richard’s absorption shows, I think, in other ways. His driving is in the Gordon Childe mode, but has never caused the havoc that it has threatened. Information technology has brought him, like all of us, great benefits, but technical malfunctions provoke an almost Basil Fawlty like response: printer problems are especially guaranteed to produce an outburst of colourful language, although he has not yet been known to stride out of the department to secure the necessary branch with which to thrash the offending equipment. Students have also witnessed examples of absorption that resulted in unexpected actions: most famous of all was the occasion when he took off his jacket during a lecture and threw it onto the window ledge, missing the target and consigning his jacket to flight through the first

floor window and into the courtyard below. I do not remember exactly when the phrase ‘doing a Bradle’ was coined (Richard will remind me of this, no doubt), but it subsumed all kinds of activities that suggested the triumph of mental absorption in archaeology over administrative necessities, physical coordination and even bodily awareness. How anyone could spend a whole day ascending and descending a Scottish mountain looking at rock art with his boots on the wrong feet is still the source of much humour in the department. To his credit, Richard is always self-deprecating about such events.

Richard’s archaeology has always had a distinctive style. He has never associated himself with an ‘-ism’ and has always tried to distance himself from a party-line, especially if he thinks that it is deterministic or what he calls ‘hard line’. Never a card carrying member of any theoretical school, he once referred to himself (in conversation) as an ‘eclectic’. He is not a theoretician, but he engages with theory and material evidence, searching for order and pattern in the archaeological record. Pattern is as important as process in his research. If you look through his books (many of which are what he would call ‘ideas’ books), you see how he has kept abreast of the latest theoretical approaches (often derived from anthropology), and yet not made them worthy or boring. For example, see how he moved from what he called ‘Binfordian fellow travelling’ in some early work (Bradley 1978), through exploration of structural Marxist models of alliance, kinship and exchange (Bradley 1984), to models of consumption and the use of material culture (Bradley 1990), social memory and ritual (Bradley 1993; 1998; 2005). Philosophically he seems to have moved from a more materialist to a more idealist stance through his career, increasingly studying human experience and what might be called the superstructure (eg, art, ritual, ideology). That he is drawn to such areas of study is perhaps not surprising, given the literary and artistic allusions and quotations from novels and poetry that are visible in his books: he even began one book with the statement that he approached the subject matter ‘through a novel and a painting’ (Bradley 1993, 1).

These books, along with a mountain of articles in periodicals and edited volumes, are easily accessible to undergraduate and

postgraduate students. Since his last classes for undergraduates nearly 15 years ago, his main teaching has involved an increasing number of Masters and PhD students, who all receive a remarkable amount of time and enthusiasm. In return the students give generously of their time in helping to maintain Richard's research infrastructure, whether this be the organisation of fieldwork, his bookshelves, his computer, his Powerpoints or even (on one occasion) his wastepaper basket.

Archaeology in Reading has grown out of all recognition since Richard's appointment in 1971, when it was a very small part of the Department of History. It became a separate department in 1977, moved into the Faculty of Science as part of the School of Human and Environmental Sciences in 2002 (when it also colonised its own, newly constructed, building), it has 19 full-time members of the academic staff and it has an international reputation for its excellence in teaching and research. Such growth is a team effort, but it is worth noting that there are a number of staff who applied to Reading for a job because of the department's distinctive reputation in Social Archaeology, which Richard had initiated. Reading is now the larger and more established department that he was seeking 40 years ago and he has enjoyed its growth, and the support and sociability of the increasing number of colleagues.

Richard will have a mixed reaction to receiving the festschrift treatment. It will no

doubt provoke uncomfortable feelings about this formal rite of passage for senior members of the profession. I think that he will be more than a little embarrassed. He may communicate that embarrassment to colleagues on more than one occasion. But underneath I think that he will be quite touched. So let me end this short contribution in the informal way that he would appreciate: well done Bradle!

## Acknowledgments

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## Drinking Tea with Richard Bradley

*Sue Alcock*

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In 1990 I applied for a position, divided between the Departments of Archaeology and of Classics, at the University of Reading. American and female, I was two years past my PhD at Cambridge, and it was my first job. I thought at the time that I was extremely lucky. And indeed I was: many years later, I am still reaping the benefits of my great good fortune.

In an academic job there is much you can negotiate, or at least attempt to negotiate: salary, space, technical support, teaching load. But the most important thing of all – the composition of your colleagues – is usually a lap-of-the-gods roll-of-the-dice. I landed in what was (compared to the situation at Reading today) a small, modestly housed Department of Archaeology. But the people, many of whom had already been together for years at that point, were something else again. The chief protagonists in my time were Richard, Bob Chapman, Heinrich Härke and Mike Fulford, also known in departmental parlance as The Bradle, Bob Binford (or Be-Bob, in honour of a serious blues predilection), and, I am sorry to report, the Hun ... I think Mike (then department chair) escaped ritual encapsulation, as did Grenville Astill. An honorary fellow traveller in Classics, Andrew

Wallace-Hadrill, was cognominated either the Wobbly Handrail or the Finn (the latter because Richard thought he looked like conductor Esa-Pekka Salonen). I became the Ballcock.

I know we all were working extremely hard, and our academic output (especially Richard's in this fertile period) will support that assertion. But we also found time to talk, especially in the seriously ratty institutional tearoom one floor up. In my memory at least, it was a rare day that some combination or other of us didn't storm up the stairs and sit for a bit, and sometimes a bit more. Of such moments are formative experiences made.

I learned a lot from all of them, but let me speak of Richard. I had read my Bradley at Cambridge, of course; had been enchanted by Bradley (1984). But Richard in the flesh and in the flow, over tea, was a mind-expanding substance. I learned of General Pitt-Rivers at Cranborne Chase and of how to think creatively with 'old data'. I had a front row seat for the thinking behind what became *Altering the Earth* (1993) – my personal favourite of all Richard's many evocative book titles, though *The Significance of Monuments* (1998) is not far behind. Monuments, landscape, memory, the finding of artefacts in 'unexpected' places and the stories that can then be wrought: all

these were engaging Richard's mind, and what Richard was thinking about, we heard. I appear to have spent much of my subsequent academic career playing in Richard's expansive sandbox, in other periods and parts of the world.

As Be-Bob already noted in his essay for this volume, Richard has always avoided academic pigeonholes, and it would be a foolish person indeed who tried to contain him within one. We talked about this once over tea, and the message that one need neither accept the labels of others, nor follow the herd, has stood me in good stead in later life. In that same conversation (and yes, I really remember this) Richard also told me he didn't originally study to be an archaeologist (law, wasn't it?), one sign of the unconventionality of mind that is undoubtedly among his greatest gifts. Add to that an abiding interest in art, poetry, and music, which runs as a strong current throughout Richard's work, and you can begin, partially, to grasp the sources of his basal originality and ongoing creativity.

What embedded much of this in my mind was not just the appealing smarts of what was being said, but the equally appealing zest with which it was conveyed. A Richard enjoying a subject is a Richard with a gleam in his eye, and if I say a somewhat manic gleam, it is said with both affection and accuracy. And the gestures ... If the wave of British royalty is akin to the delicate screwing in of a light bulb, Richard's hands, in full descriptive mode, resemble nothing so much as twin windmills of enthusiasm. Small stuff was not allowed to interfere with the joy of thought and communication, with some of the idiosyncratic

results Bob has described. The most epic 'doing a Bradle' of the early 1990s, an episode which involved Richard attempting to dry his hands, has clearly been censored, but I am happy to reminisce further on request.

Richard was never an institution builder in the traditional sense of someone willing to take up the burdens of administration, advocacy and collective leadership. But the longevity of his commitment to the Department of Archaeology at Reading, the consistent high quality of his work and his profile, and his ethos of intellectual independence: all contributed to making it the strong and distinguished place of scholarly enterprise it is today. But when I was at Reading (a stint which lasted only a couple years, before I made the hard decision to go back home to the States), it was something more than that, at least for me.

Academic institutions change endlessly through time. People come and go, strictures and budgets evolve and harden, life moves on. But there can exist moments and spaces, however brief and delimited, of true scholarly generosity and collegiality, where you can sit, drink tea, and talk about what you love with people of like mind and heart. If you get moments like that, enjoy them for yourself. If you can, create them for others. They may be ephemeral, but they last forever.

So Richard? Thank you. You altered our earth.

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# Are Models of Prestige Goods Economies and Conspicuous Consumption Applicable to the Archaeology of the Bronze to Iron Age Transition in Britain?

*John C. Barrett*

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*Models of prestige exchange and conspicuous consumption have been widely applied to the interpretation of archaeological deposits and possible developments in political structure in later prehistory. This paper explores the reasons for the popularity of these models before questioning their validity. In their place an alternative model of value is offered in which commonly held values did not derive from competitive systems of exchange and display but from a practical involvement in the forces that governed the reproduction of life.*

Over the last 40 or so years Richard Bradley's research has explored the span of European prehistory, from post-glacial hunter gatherers to the first contacts between indigenous societies and the westward expansion of the Roman Empire. His research output is extensive, and at the risk of over simplification it can be summarised as addressing three major themes: the management of landscape resources; the nature of exchange relations accompanying strategies of consumption; and the marking of the landscape by means of rock art and monument building. As Richard has demonstrated, the ways the relationships between these three themes changed over time can be used to write a narrative for prehistory. In this contribution I will consider one such

relationship, that between land and the processes of artefact exchange and consumption, and the narratives that have arisen from it in the period that defines the end of the Bronze Age and the beginning of the Iron Age. This theme played a role central to Richard's work between the 1970s and early 1990s enabling him to explore the changing patterns in landscape organisation, artefact deposition and monument construction between the last half of the 2nd millennium and the first half of the 1st millennium BC. My purpose in the paper is to question the widespread assumption that prestige goods economies and conspicuous consumption were mechanisms basic to the social dynamics of that period.

## An indigenous Iron Age

The fundamental change in the explanation of culture change that occurred during the 1960s is well known. The long-established presumption that the developments witnessed in artefact style and monument construction were driven either by invasion or by diffusion was rejected (Clark 1966). In its place cultural assemblages were viewed as the mechanisms by which differently organised populations were maintained by the exploitation of various kinds of resource. As a consequence change was presumed to be internally driven and the form and development of material culture was explained with an emphasis on the social processes by which a population might have been organised, and on economic processes concerning the adaptation of a population to its environment. Material culture was now seen from two perspectives: as representing social organisations by the use of symbols of rank differentiation, and as representing the technologies by which these organisations sustained themselves through strategies of production and consumption. By adopting the analytical distinction between social organisation and subsistence the challenge was to formulate some clear-cut ideas as to the ways they assumed the 'social' and 'economic' aspects of life were related.

The British Iron Age was one period that witnessed the full force of the changes associated with the adoption of socio-economic explanations for cultural change. In 1959 Christopher Hawkes published his final iteration of a scheme for the British Iron Age which he had been developing over the previous 30 years (Hawkes *et al.* 1930; Hawkes 1931; 1959). It treated the Iron Age sequence as one of cultural stages resulting from three different periods of migration from continental Europe. In a quite dramatic turn of events Hawkes's scheme was immediately challenged, first on the empirical details of the material associations that had been used in its support (Hodson 1962), and second by the observation that only restricted quantities of continental material could be identified in the British sequence (Hodson 1964). These possible traits of continentally derived material were, according to Hodson, marginal to the more dominant pattern of cultural continuity based upon the development of an agricultural

economy that was put in place during the Bronze Age. The centre-piece of Hodson's alternative view of Iron Age development was occupied by the site of Little Woodbury (Bersu 1940; Brailsford & Jackson 1948); an Iron Age enclosure on the chalkland of southern England whose structural remains had been characterised by Bersu as the domestic architecture and the facilities necessary to manage a mixed agricultural economy. The image of Little Woodbury as a self-sustaining farmstead characteristic of the Iron Age agricultural economy was adopted by Hodson and went on to gain wide, but not uncritical, acceptance (Bowen 1969).

If, as Hodson argued and others soon concurred, the British Iron Age was the product of agricultural and settlement continuity born out of a Bronze Age agricultural economy (although admittedly distinguished by a change in metal technology), then a number of other developments in landscape and settlement organisation still demanded explanation. Hillforts, for example, had long seemed to be among the most evocative symbols of military conflict: their setting and the form and sequential development of their defences obviously evoked narratives of migration, conquest and resistance, whereas they now had to be recast in terms of economic development and social continuity, and the antecedents of hillforts were expected to be found in the Bronze Age.

In the early 1970s Bradley contributed to this recasting of hillfort histories in terms of economic continuity and social evolution. Two papers sought to identify landscape organisation and the associated precursors of some southern British hillforts among Bronze Age enclosures that were claimed to have operated in areas of either arable or pastoral land management (Bradley 1971a; 1971b). The distinction between the two categories of enclosure, established in part some thirty years earlier (Piggott 1942), was not to withstand closer scrutiny, but the original idea at least prompted further field work including excavations at Rams Hill where a sequence of Bronze Age earthwork and palisaded enclosures could be traced within the circuit of an early Iron Age hillfort (Bradley & Ellison 1975), and at South Lodge Camp where a smaller Bronze Age enclosure and cemetery over-lay cultivation terraces (Barrett *et al.* 1991).

However, if a sequence of economic continuity did exist then it was still clearly accompanied by periods of significant development such as the increased scale of construction witnessed by the early Iron Age rampart at Rams Hill and, indeed, by the widespread adoption of an iron technology.

The second of Bradley's papers (1971b) appeared in an edited volume of hillfort studies dedicated to Sir Mortimer Wheeler (Hill & Jesson 1971). It was an important volume because it captured the changes in direction upon which hillfort studies had by then embarked. These included accepting the early dating of some sites implying their likely foundation in the Late Bronze Age (Stanford 1971), the modelling of the distribution and size of hillforts as indicating geographical factors at play in their development (Hogg 1971), and the exploration of the possible role of hillforts in integrating the management of their regional economies (Cunliffe 1971; Collis 1971). It was the latter role, as centres of redistribution situated in well organised agricultural landscapes that informed the later discussion of the sequence of enclosures at Rams Hill (Bradley & Ellison 1975, 209). And as these ideas were developing so too were the priorities employed in hillfort excavation. These moved away from the desire to establish defensive sequences in terms of cultural influences, and towards embracing the need to understand the internal architecture (Musson 1971) and organisation of activities as indicative of the changing function of these sites within the wider landscape. In southern Britain the place of the excavations on the hillfort at Danebury, which commenced in 1969, were to prove pivotal in the development of these ideas (Cunliffe 1984).

Over the last 30 years or more it has become clear that if the historical trajectory out of the Bronze Age and into the Iron Age was indeed driven by indigenous processes then those same processes must have also been responsible for generating significant levels of structural change. The evidence of land divisions and field systems implies that relatively intensive systems of agricultural production had emerged in many areas of Britain during the first half of the 2nd millennium BC, which, at least on some of the chalk uplands, was over-cut during the later part of the Bronze Age by an organisation of linear earthworks.

New levels of settlement nucleation and a few substantially enclosed domestic buildings represented by so-called ring-forts (Bradley 2007, 206) also emerged in some parts of Britain in the latter half of the Bronze Age. Very few hillforts were in fact founded before the end of the Bronze Age (Needham 2007, 55) and their Iron Age development resulted in what Cunliffe has identified as large 'developed' sites witnessed by the building of multivallate defences and enclosing dense settlement activity. Nucleated and long lived settlement sites are also increasingly a feature of the Iron Age landscape. The processes of continuity that Hodson had identified with the agricultural economies of his 'Woodbury Culture' were therefore seemingly capable of generating growth in the scale of the settlement systems with which they were associated. The challenge remained: to identify the mechanisms that drove such growth.

### Searching for the evolutionary process

By abandoning the invasion hypothesis researchers confronted the need to explain change in socio-cultural systems by reference to processes that were of an indigenous origin, and these tended to privilege systems of economic management. 'Systems thinking' was widely adopted to facilitate this shift in perspective. It appeared initially to provide the basis for the identification of the required indigenous processes. The latter were described in terms of feedback mechanisms operating both between different functional components of the system, and between the system and its environment. Given that Hodson had argued that the British Bronze and Iron Age sequence was one of an evolving continuity, then the ways socio-cultural systems adapted to environmental conditions through the agricultural economy was obviously going to be of prime concern. Clearly the relationship did not appear to have been one of stability: changes in agricultural and settlement organisation accompanied the changes in scale and nature of craft production in general, and in metal technology in particular, during the first half of the 1st millennium. These changes also seemed, on the face of it, to be broadly directional in as much as the range and scale of settlement sites seemed to increase throughout the period. That said, it is

often over-looked that nearly all the prehistoric settlements investigated archaeologically owe their availability and survival to their abandonment. Consequently, if there was a global trend towards growth in the scale of the agricultural economy in later prehistory then it must have been produced out of localised cycles extending across both growth and contraction. Consequently an evolutionary mechanism would have to explain how the socio-cultural system could drive this cyclical expansion in agricultural productivity.

Exchange has proven to be the single trope shared by all narratives of socio-cultural evolution written after the abandonment of the invasion hypothesis. Economic archaeology has been written as the analysis of exchange patterns (cf. Earle & Ericson 1977), and social archaeology as the archaeology of systems of exchange management (Renfrew 1984). The significance of exchange seems self-evident: it links people, settlements, and ecologies via the movement of raw materials and finished products. Exchange links producers and consumers and it will, in short, have networked the individual components of the social system as well as linking the entire system to its wider environmental contexts. However, the organisation of exchange had to be used to do more than merely describe the arteries through which materials flowed; it had to show how it was deployed to effect change and systemic growth.

Exchange in the Bronze Age is obviously attested by the supplies of metals reaching beyond their European ore sources and of metal artefacts themselves. It is also evoked by later images of landscape management, for example the Iron Age hillfort of Quarley Hill in Hampshire constructed over the junction of a number of linear ditches that appear to define separate territories (Hawkes 1939), or Woolbury, also in Hampshire, which is also located at the junction of differently utilised blocks of land (Cunliffe 2000, 155–60). Barry Cunliffe's work at the hillfort of Danebury and in its immediate environs has developed the case for economic and social integration among these Iron Age communities by means of the exchange of agricultural products and raw materials. But how might the relationships implied by these exchanges and the management of resources have resulted in systemic growth?

Bradley and Ellison's proposal that certain seemingly dominant sites, such as Rams Hill, arose in the Bronze Age to fulfil the function of redistribution centres had derived ultimately from Service's suggestion that chiefdoms functioned to redistribute, and thus integrate, a mosaic of specialist producers working with ecologically diverse resources (Service 1962). Although the claim that redistribution represented the functional impetus for the emergence of centralised systems of social storage and display came to be widely accepted (cf. Renfrew 1972; 1973, 543), and is indeed still hinted at in Cunliffe's treatment of Danebury, the general application of the model was demolished by Earle (1977). He demonstrated that in the case of Hawaiian chiefdoms they did not integrate ecologically diverse regimes of production but rose to dominate productively generalised ecologies. For Earle, chiefdom-type systems were certainly centrally organised and socially complex, but the upward exchange of tributary materials did not account for the emergence of those elites but rather represented their ability to procure the 'wealth finance' to support elite activities. From this perspective these exchange processes were carried forward through the control exercised by social hierarchies that were able to maintain a form of centralised administration. Such 'political economies', therefore, financed the institutionalisation of those elites who, rather than arising as the managers of diverse and ecologically specialised producers, were the manifestation of exploitative relationships that appropriated part of the economic product of subservient producers (cf. Gilman 1981). However, the mechanisms by which these systems evolved remained entirely obscure (cf. Flannery 1972, 402–8).

In 1977 Friedman and Rowlands published a long essay dedicated to providing an 'epigenetic' model for the rise of 'civilisation'. This was to have considerable impact upon the archaeological understanding of the role of exchange in prehistory. A key feature, enthusiastically embraced by archaeologists, was the concept of the 'prestige goods economy', which Friedman had drawn from the work of Kajsa Ekholm and which Frankenstein and Rowlands went on to use, with considerable effect, in their explanation for the rise of early Iron Age chiefly society around the upper reaches of the Danube in the 7th century



BC (Ekholm 1972; 1977; Friedman 1979; Frankenstein & Rowlands 1978). Basic to the Friedman and Rowlands model is the claim that the diverse histories of tribal societies were the manifestation of widely shared structural principles that governed their reproduction. These principles of social reproduction operated within differently evolving ecological constraints and in the context of a world system of resources that varied geographically and historically. The implication, that 'structures are not directly observable, only their functional effects' (Kristiansen & Rowlands 1998, 7) posed a particular challenge for the relationship between theoretical descriptions of structural conditions and the empirical analysis of material patterns. Were empirical studies simply meant to confirm the theoretical model, or could the theoretical perspective be assessed by empirical means? In the case of many studies that followed the former appeared the chosen option.

The focus the Friedman and Rowlands model placed upon social reproduction meant that whilst the household could have been a basic economic unit of production and consumption (as defined by Sahlins' concept of the Domestic Mode of Production (Sahlins 1974, 41ff.)), this day-to-day self-sufficiency was only maintained through a dependency that rested on other households to procure the matrimonial alliances necessary for biological reproduction (Friedman 1975, 167; Friedman & Rowlands 1977, 206–8). Over time these relationships resulted in situating the reproduction of each household within a lineage of generational relationships that extended back towards founding ancestors and its mythical origins.

'Economic activity in this system can only be understood as a relation between producers and the supernatural. This is because wealth and prosperity are seen as controlled directly by supernatural spirits. The latter however are not separated from the world of the living in any absolute way. On the contrary, the supernatural is no more than the extension of the lineage structure so that ancestors are spirits whose function it is to communicate with higher spirits in order to bring wealth to the group.' (Friedman & Rowlands 1977, 207)

Thus the success of a particular lineage and the wealth that it produced appeared to derive from supernatural forces whose patronage was manifest in the household's ability to

host displays of consumption such as feasting. The inherently competitive demonstration of lineage, and thus spiritual, superiority could have been further enhanced by mobilising the asymmetrical relations of matrimonial exchange which brought junior households and less successful lineages into the expanding political orbit of the dominant group. Political authority thus increased the potential scale of the labour product available to the dominant lineage, along with the tribute flows from marital obligations, and these together would have visibly increased its own status, which was taken as a further manifestation of its spiritual pre-eminence.

Two further possible stages of evolutionary development were then envisaged. The first was when the relatively fluid ranking between lineages was converted into an absolute ranking by a chiefly lineage establishing its position as ritual intermediary between junior lineages and ancestral and spiritual authorities (Friedman & Rowlands 1977, fig. 3). The second was when the development of a prestige goods economy circulated valuables that could be used for sumptuary display, votive deposition or as gifts to extend alliances (cf. Helms 1988). A prestige goods economy would have further facilitated the capturing of these open and expansionist systems by centres of state and imperial domination that were able to ship such 'trinkets' into the hands of indigenous elites. The restricted and exotic nature of these items within the indigenous system could then have been exploited by votive display and by generosity that out competed other political contenders.

In terms of the simplest level of its formulation, the Friedman and Rowlands' model proposed that local ranking would originate through competition in the realm of biological reproduction. This had to assume that there existed an inherent asymmetry in the exchange between households of marriage partners and that under circumstances of ritualised exchange and competitive display this could be transformed into a higher level of political domination. At this evolutionary stage a successful lineage established its authority to mediate on other's behalf with the ancestors and deities that were believed to govern the well-being of the polity as a whole. At a world systems level, these regional polities could eventually have been captured by city

states or imperial centres through a complex mix of military conquest, marriage alliances, hostage taking, patronage, and aggressive trading, processes which in their various ways introduced mass produced materials into locally ritualised and elite practices.

There are four reasons why the Friedman and Rowlands' model appeared attractive. First it offered a possible explanation for the development of institutional ranking without recourse to dubious claims that chiefdom-type systems necessarily arose to satisfy the managerial need for redistribution. Second, it integrated agricultural production, the exchange of people, and the exchange and consumption of valuables into a single system of political reproduction. Third, it showed how particular ecological, geographical, and historical factors contributed to the evolving form of a political structure. And finally, by describing the interplay of ecological conditions, agricultural production, settlement development and ritual display, it seemed to privilege historical processes that were visible in such well-established categories of archaeological data such as environmental sequences, settlement sites, exchange patterns, and votive and funerary deposits.

If this model does indeed present us with the basic structuring principle for the evolution of social complexity, then that principle was that kinship systems were extended over time and space as households increasingly sought to align themselves politically within a value system that appeared to derive from the supernatural. These supernatural qualities were made manifest in a number of possible ways: through personal appearance, by success in the scale of household production, through acts of generosity, and by ritual mediation between the wider lineage and supernatural forces.

### **The problem posed by Bronze Age economies for the transition to the Iron Age**

Bronze Age economies thus came to be accepted as economies of political reproduction where types of exchange constituted relationships of indebtedness and patronage between agents (cf. Mauss 1969), and where scales of consumption constituted status. These cycles of exchange and consumption not only linked together 'social' and 'ecological' systems but

they also structured hierarchical distinctions between people, their ancestors, and their gods. Given that the political process was envisaged as operating strategically and competitively then this perspective appeared to guide the analysis not only of the growth of local polities but also of the potential conflicts over access to resources that had operated between those polities. It also threw into relief the likely contradictions between the principles of reproduction and the available resources that could have driven ecological degradation and consequent political collapse (cf. Kristiansen 1978). The attractiveness of this perspective for the study of the Bronze Age seems obvious: the period bears witness to extensive exchange networks delivering, among other things, the metals and metal artefacts that were not simply of utilitarian value but that might have also included numbers of display items. Metalwork was amongst the material deposited in a range of contexts, including graves and possible 'votive' deposits representing the possible investment of symbolic capital in the supernatural domain from whence political genealogies claimed their derivation.

Procurement across the European continent of metals, along with exotic and presumed prestige materials, and their use in both utilitarian and votive domains was therefore treated as being fundamental to the development of political institutions for which varying trajectories of political evolution could be postulated (Rowlands 1984, fig. 1). One implication of this approach was to dissolve the distinction between subsistence production and production for exchange: 'such differentiation ... ignores completely the often high symbolic value that is attached to the consumption of particular kinds of foodstuffs in these ceremonial exchange systems' (Rowlands 1984, 150). Indeed, increased levels of food production might have been driven by competition through feasting as well as by the growth in household size and in the scale of alliances that defined the political expansion of successful lineages. Bronze Age polities could be regarded as lineages that drove the levels of local production to secure their position in regional networks of exchange (cf. Yates 2007).

However, if the long-distance exchange of those metal supplies necessary for bronze production was indeed the fly-wheel driving



growth in agricultural production, and if Hodson was correct in his assertion that Iron Age agricultural economies in Britain originated among those established during the Bronze Age, then how might we account for this continuity (and indeed seeming growth) in agricultural production, given that the circulation of bronze appears to have collapsed in the ninth century to be replaced by the local availability of iron? Why did this very significant rupture in what has been widely claimed as the major artery in the political system of exchange not prove fatal to the wider political economy?

### Inalienable value

One possible solution to this problem is to accept that, whilst the exchange of metals was certainly necessary for the production of a substantial corpus of tools, ornaments, and weapons, and therefore long distance exchange necessarily sustained the bronze industry whereas more local exploitation sustained iron production, these types of exchange networks did not structure the reproduction of the political economy. This would imply that the idea of a prestige goods economy has misdirected our reading of the archaeological data, along with claims that the conspicuous consumption of metalwork through deposition functioned in the competition for status. After all, amongst the British and western European material, the normally singular deposition of locally produced swords and spearheads hardly amounts to significant sacrifice of substantial quantities of prestige exotics. Voicing these doubts is not to deny that votive deposition occurred, but it does question the idea that such acts were themselves *determinate* of political standing.

The archaeological question has been how might the observable patterns of artefact distribution and the character of their deposition be used to describe the operation of the Bronze Age political economy? Part of the answer has involved generalising from ethnographic analogies, dominated by the limited examples of Kula exchange and North American potlatch systems, to produce relatively abstract models of gift and, by way of contrast, barter exchange systems (cf. Gregory 1982). The emphasis upon exchange chimes with Appadurai's observation that things

lack an inherent value and are therefore only endowed with value through exchange. From here we might conclude that social systems are reproduced through 'regimes of value', where 'economic exchange creates value.' By focusing on 'things that are exchanged' it becomes 'possible to argue that what creates the link between exchange and value is *politics*, construed broadly' justifying 'the conceit that commodities, like persons, have social lives' (Appadurai 1986, 3–4; original emphasis). Appadurai regards commodities as 'goods intended for exchange, regardless of the form of the exchange' (1986, 6), thereby accommodating gift, barter, and monetary exchange among the various means by which commodities might circulate.

However if we also follow Kopytoff (1986) and treat the social life of things biographically, then we will encounter objects that are either at some stage in their biography withdrawn from commodity circulation, or never enter circulation at all. Nevertheless these things have value posing a potential problem given that the value of these particular things is not fixed in virtue of an exchange relationship but is expressed by the fact that they cannot be given: in other words their value is expressed in terms of an emotional commitment towards a quality essential to the thing itself. Weiner established that an inalienable object was constituted by:

'its exclusive and cumulative identity with a particular series of owners through time. Its history is authenticated by fictive or true genealogies, origin myths, sacred ancestors, and gods. In this way, inalienable possessions are transcendent treasures to be guarded against all exigencies that might force their loss ... [I]nalienable possessions are symbolic repositories of genealogies and historical events, their unique, subjective identity gives them absolute value placing them above the exchangeability of one thing for another.' (Weiner 1992, 33)

Weiner's point is that the conservation of items such as these is related to the conservation of identities, and that exchange involves substitutes or tokens for those things retained and, therefore, for those identities. If inalienable items are ever given it is either done so on 'loan', or at times of severe stress and submission to unassailable demands (cf. Godelier 1999).

Inalienable objects are treated as the materialisation of the historical and spiritual values, and persons and communities live out those values by the care they bestow upon that particular portion of material world. The values

thus expressed are the base or foundational values against which exchanges and alliances may be negotiated. These materials embody the values of the ‘commons’ whose definition Gudeman widens to be:

‘a shared interest or value. It is the patrimony or legacy of a community and refers to anything that contributes to the material and social sustenance of a people with a shared identity: land, buildings, seed stock, knowledge of practices, a transportation network, an educational system, or rituals. As the lasting core, though changeable over time, the base represents temporality and continuity. Without a commons there is no community; without a community there is no commons.’ (Gudeman 2001, 27)

It is important to stress that these materials would never merely represent the forces or values that gave a community its identity but would have been the material manifestation of those very qualities. They give substance to identity and give the sacred presence. It was, therefore, as if the forces of creation that secured the realities of experience were rendered material (cf. Miller 2005, 1). The reproduction of the community – that is of the household and its alliances – will thus have depended upon the ability to maintain and, perhaps, embellish this sacred assemblage of practices, knowledge, objects, and places. We can now understand that the labour of economic activity could only have produced and exchanged the materials required both for sustenance and for social prestige, if it was also embedded in moralities of identity and purpose. It follows that economic continuity requires the continuity of the forces and conditions upon which that morality of existence was founded.

### **The grounding of economic continuity**

This argument displaces the cycle of production and exchange from its centrality to economic analysis and recognises that value, traditionally identified with values found in exchange and use, arises at a base level in the experiences (practical and material) which gave security to human existence. In other words, some material conditions were valued because they were manifestations of the forces that made the world for humanity. Not all such forces may have appeared benign, and humanity’s obligation to these fundamental conditions of

existence would seem self-evident. The care, maintenance, and extension of inalienable conditions were thus the care, maintenance, and embellishment of qualities that were also possessed by certain portions of humanity and their loss will have amounted to the loss or erosion of that humanity. It follows that a particular human condition could become the focus of compromise and indeed ownership by others via an assault on this inalienable core.

Marx saw the essential quality of humanity as constituted through labour and that the alienation of labour diminished that portion of humanity that was sold into the ownership of others. The problem that Marxism has continued to grapple with is that consciousness seems to resist recognising these relationships of labour linking people’s bodies, technologies and materials as purely material relationships but instead seeks to reify the solidly material into a supernatural derivation. The consequent duality of the ‘mental’ and the ‘material’ (Godelier 1986) depends upon the deeply held belief that experience gives rise to mental representation, and that it is through such representation that consciousness emerges. This formulation is extremely problematic. The distinction between a base of material relationships and the conscious superstructure of supernatural forces is in fact treated as if consciousness somehow, and quite generally, deforms the human experience of what is real. Marx’s struggle was, therefore, to pull aside the surface appearances deemed to be a ‘false consciousness’ and to expose the materialist reality of exploitation; central to his task was the de-mystification of the commodity value of things.

Bloch discusses the problem that arises when anthropologists attempting to write of ‘what goes without saying’ embodied in the practices of the social agents, produce accounts that treat social practices as if they were the execution of the ‘native’s’ thought processes. These processes, explicitly conceptualised as the rules of behaviour, then appear ‘alien, bizarre, or impossibly complicated’ to the informants to whom they supposedly belong. Bloch believes that the confusion lies in adopting a model of thought that is:

‘logic-sentential and language-like. We tend to imagine thinking as a kind of silent soliloquizing wherein the building blocks are words with their definitions and the process itself involves linking propositions by

logical inferences in a single lineal sequence ... Rather [everyday thought] relies on clumped networks of signification which *require* that they be organised in ways which are not lineal but multi-stranded if they are to be used at the amazing speed necessary to draw on complex stored information in everyday activity' (Bloch 1992, 127, 128; original emphasis).

The problem for Bloch, and this despite his reference to the practice theory of Bourdieu (1977), is that he remains wedded to the view of action as the outward representation of mentally stored information. However the very point at issue for Bourdieu was that it is through practice and not some intellectual scheme that bodily and emotional security is constructed. Whilst the contrast might appear subtle, the simplest way to express it is that we must distinguish between the image of the detached observer who contemplates experience, and the practitioner who finds the way things work by the brute experience of coping. Of course contemplation as a bringing to mind of an order discovered in things occurs, but it can only arise from being in the world in the first place. Living is not thinking about living, it is about doing; it is a practical commitment towards one's self, towards others, and towards certain things. Living is directional, a moving towards an emotional and physical security arising out of the practical discovery that others and that things have a value for the self. Consequently, identities are not the product of singular self-reflection but are what others recognise in the performance of one's selfhood (Barrett 2012). The degree (or failure) to which the harmonisation of bodily practice is achieved with the forces perceived as being manifest in the order of things can express a certain status of humanity. In the Zafimaniry example explored by Bloch, the growing solidity of the house harmonises with the growing maturity of the physical body and the making of a good marriage. The house does not represent the latter but rather the processes of growth and solidity harmonise in all these things in ways that go 'without saying'.

How might the reorientation of the economy towards base level economies of the self and of human solidarities impact upon our understanding of the history of the Bronze Age political economy? First, social distinctions might now be understood as being built up from the presence or absence

of qualities such as maturity, spirituality, strength, genealogical inheritance, and the characteristics of sexuality, that were manifest in appearance and bodily disposition (Treherne 1995). Such qualities would have been widely regarded as deriving from forces that were given and manifestly inalienable. By means of cultural elaboration these qualities will have been reproduced in terms of particular institutionalised characteristics, in other words culture will have been the making explicit of that which was 'natural', and once this order is made explicit, once it had been objectified, then claims to mediate between human experience and the sacred could begin to be made by some on behalf of others. Cultural relationships will therefore have been reproduced in terms of authority and obligation. Second, the trajectory of economic continuity will have depended upon the practices that reproduced this naturalised order, and this could well have sustained technological change. Indeed it is likely that these base values, embodied in the practices of selfhood and identity, are likely to have been very long-lived and to have been widely shared, such that the longevity and geographically extensive principles that have been identified by Kristiansen and Larsson for the Eurasian Bronze Age seem entirely plausible (Kristiansen & Larsson 2005).

The case for economic continuity underlying the changes that displaced bronze working by an iron technology can now be re-asserted. Growth in agricultural production need not have been driven by cycles of competitive consumption that supposedly underpinned the development of political ranking and were dependant on the long-distance supply of bronze. Consequently, growth in agricultural productivity need not have been vulnerable to the change of metal technology, with the attendant collapse of these exchange networks, simply because it was the practices of agricultural production that connected people with the inalienable values of the commons. Furthermore, there is now no reason to assume that political rank must have depended upon the conspicuous consumption of prestige objects (an occurrence that has been more often assumed in Bronze Age studies than effectively demonstrated). Indeed, the application of the model of a prestige goods economy in the analysis of Bronze Age political structures applied to so much of temperate Europe might usefully be abandoned.

Gudeman comments that the cultural values of the commons 'are often drawn from immediate experience' (2001, 34), and among such experiences we might expect those of fertility, of the life cycle, and of lineage to have been prominent. These experiences would have exposed the forces that governed the order of life and it is important to accept, as Gudeman indicates, that this order was not the product of mental abstractions being projected onto the world, but was instead the rationalisation of the direct experience of labour and of the inherited traditions associated with place and with landscape.

The Iron Age landscape saw the development of a variety of settlement forms, from hillforts to various types of enclosed and open settlements. As we have seen, the long-held expectation has been that this variety mapped differences in function and social status, where each settlement belonged to a larger, integrated socio-economic system (cf. Clarke 1972, fig. 21.12). However, excavation has failed to reveal clear-cut distinctions in production or status between the various types of settlement. The alternative is now to treat these sites as nodes of activity at which the security of being arose from the practical maintenance of inalienable values. This implies that later prehistory, over much of southern Britain, was defined by a commonality in land and in the cycles of biological reproduction. It should, therefore, come as no surprise that the pit silos dug to store the life giving fertility of the seed grain might, at their abandonment, embrace the debris of consumption and the deposits of death (Hill 1995; Cunliffe 1992). But why if this is the commonality of life do we encounter the diversity in settlement form?

A recent, and perhaps surprising, result of work on the landscapes of some of the larger hillforts has been the recognition of a horizon of settlement abandonment in a zone around these sites at the time of their expansion as 'inhabitants were absorbed within the boundaries of the hillfort' (Sharpley 2010, 76; cf. Cunliffe 2000, 184; Tabor 2008, 73ff.). The contraction of part of a more dispersed population into such heavily enclosed and densely settled centres is one of the most remarkable features of later European prehistory and is unlikely to have been result of a single cause. In the case of the developed hillforts in southern Britain the basis for the

commonality of life continued to be expressed in these sites through the cycles of biological reproduction and its explicit manifestation in cultural, ritualised and political orders. These were not urban sites because those whom they accommodated came together not as strangers but with a common commitment to an inalienable heritage. Nor were they markets, not because bartered exchange did not occur (it would be almost impossible to imagine communities of such size existing without this option for exchange), but because commercial exchange was not the basis for the systems of value in which they operated.

## Conclusion

Richard Bradley opens his study of hoarding and votive deposition in prehistory with reference to Mallory's *Le Mort d'Arthur* and the account of Sir Bedevere's reluctant return of Excalibur to the Lady of the Lake at the command of the dying king (Bradley 1990). The analogy Bradley draws between the return of the sword of kingly authority to its source and votive deposition in prehistory captures the idea that those tokens of the things which were inalienable had to be held secure for all times. The objects deposited in later prehistory may have marked the practices and processes by which the economies of identity were maintained, and their deposition may have been a routine part of the processes of reproduction, or have been ritually mediated. However, it seems unnecessary to encumber the acts that acknowledged the factors governing the cycles of life and death with a model of conspicuous consumption and prestige exchange. By maintaining the former and discarding the latter we are in a better position to understand the lengthy continuities of later prehistory and the ways these could withstand significant shifts in exchange relationships and in technological processes. We might also begin to grasp how little, and how unrepresentative, is the sample of deposited material recovered archaeologically compared with that which was actually in circulation.

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# Stonehenge and the Beginning of the British Neolithic

*Mike Parker Pearson*

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*Richard Bradley's work has highlighted how study of the construction and modification of monuments might reveal histories of religious and political action. Here, the sequence of events at Stonehenge, beginning with poorly understood episodes of pre-monument activity, is reviewed. This is placed within a wider consideration of political histories during the Neolithic. Regionalism, ethnic and political tensions that emerged during the 4th millennium BC culminated in conflict. However, by the beginning of the 3rd millennium BC we can identify a growing commonality of cultural practices across a widening territory within Britain, suggestive of a changing conception of identity and belonging. Stonehenge's first two stages were built during this period of a widening pan-British commonality of practices. Drawing together materials – bluestone and sarsen – that represented the ancestries of different groups, could the building of Stonehenge have been a political act of union, creating or formalising the concept of a unified Britain?*

'The histories of the stones themselves may have encapsulated a narrative that was crucial to the identity of the builders' (Bradley 2000, 96)

There is a radiocarbon date from Stonehenge (Fig. 4.1) that no one talks about. It is a date of 4360–3990 cal BC at 95.4% probability (OxA-4902; 5350±80 BP) on a cattle-sized longbone fragment (Cleal *et al.* 1995, 189–90, 441, 522–3) from the packing of Stone 27 in the sarsen circle (Fig. 4.2). Since the construction of the sarsen circle is dated by an antler pick to 2655–2485 cal BC (Cleal *et al.* 1995, 524–5), this cattle bone has been interpreted as residual

– around 1500 years earlier than its context  
– and the matter has been taken no further.

If the radiocarbon determination is correct (and there is no reason to question it), then this bone fragment raises interesting questions. Where was it residual *from*? Or might this particular stone just possibly have been erected much earlier than the rest of the sarsen circle, as a standing stone later incorporated into the circle? Is the bone really from a domesticated animal or is it actually from a wild species, perhaps aurochs or even red deer?

Stone 27 is certainly an oddity: unlike its

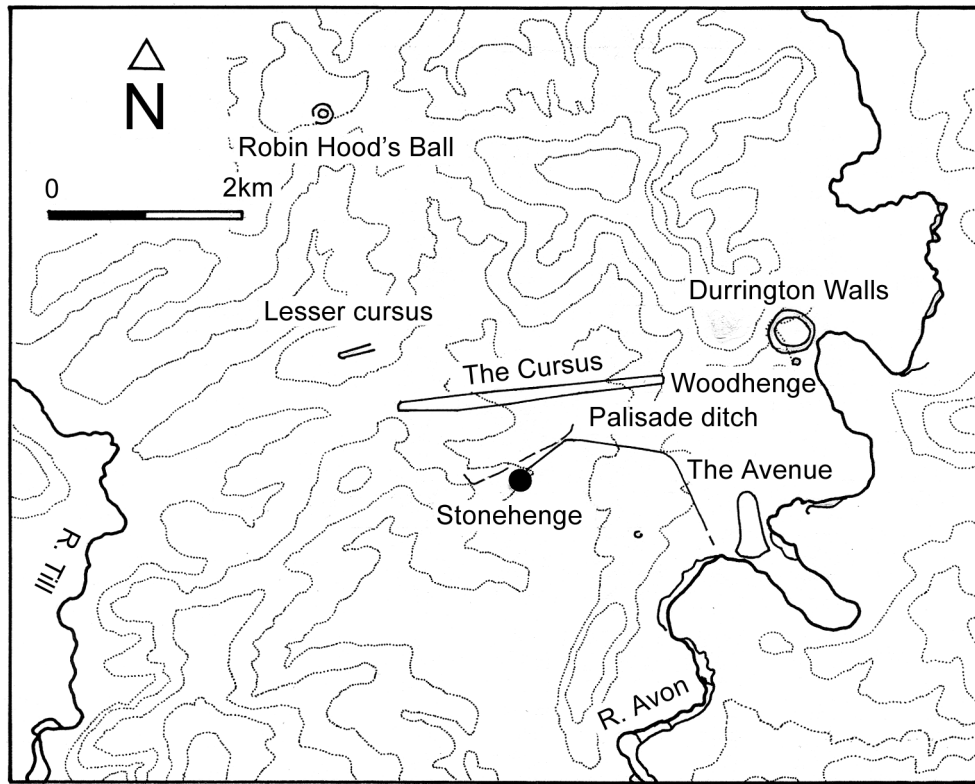


Figure 4.1: Stonehenge in its landscape (drawn by Irene Deluis)

neighbours, it has no tenons on its upper surface to fit into the mortise holes of the lintels that originally rested on the sarsen circle. Just possibly it really is an orthostat far more ancient than the rest, around which the other stones of the circle were built, though we would want more evidence for this. If we consider the more likely option that the bone is residual, there is the possibility that it was brought from wherever it had been curated to be incorporated into the packing of the stone. Such an argument might draw support from the fact that at least one of the animal bones placed in the bottom of Stonehenge's ditch, dug in 3000–2920 cal BC, was curated: the tibia of a red deer that died in 3500–3040 cal BC (Cleal *et al.* 1995, 522–3). Perhaps more feasibly, the cattle bone was lying in the topsoil when the stone hole was dug and it became incorporated into the rubble that was packed around the upright Stone 27.

It may be possible to tell whether the bone is that of a domesticate if permission to sample it for ancient DNA is one day forthcoming. In the meantime, the fragment is too small for a positive identification to species (Serjeantson 1995, 441; and pers. comm.). If it is from a domesticated animal then it is the

earliest evidence for the Neolithic in Britain. Even if not, it still implies that either the site of Stonehenge was of some (unknown) significance around the transition to farming or that it was associated later on with that important change in Britain's prehistory.

There is very little artefactual evidence of the Early Neolithic at Stonehenge, just a sherd of Carinated Bowl from the enclosure bank (Cleal *et al.* 1995, 350) and a leaf-shaped arrowhead and associated flints from the Stonehenge Riverside Project's Trench 44, about 100 m to the north of the stone circle (Parker Pearson *et al.* 2008). The lack of material remains from the 4th millennium BC at Stonehenge itself contrasts with the many long barrows and two cursususes (Richards 1990; Thomas *et al.* 2009) in close proximity. If anything, the actual site of Stonehenge itself was largely or entirely ignored throughout that millennium.

Discovery in 2008 of a natural landform lying beneath the Stonehenge Avenue on its solstice-aligned section between the Heel Stone and the Avenue's 'elbow' has resuscitated the spectre of long-term continuity from the 8th–7th millennia BC – when pine posts were erected in what is presently the visitors' car park at Stonehenge (Cleal *et al.* 1995, 43–7) – to the



*Figure 4.2: Stone 27 as seen from outside the circle of sarsens at Stonehenge (photographed by Adam Stanford of Aerial-Cam)*

Middle Neolithic when Stonehenge's enclosure bank and ditch were constructed in 3000–2920 cal BC. The SRP's re-excavation of Atkinson's Trench C48 (SRP Trench 45) revealed that the Avenue's parallel banks were laid on top of a pair of natural ridges, between which lines of unusually wide and deep periglacial gullies had formed in the tundra-like conditions of the Ice Age (Fig. 4.3). The Avenue's ditches, dug in 2480–2280 cal BC, follow the outer edges of these two ridges, thereby demonstrating that prehistoric people were aware of these unusual landforms and their coincidental alignment on the midsummer sunrise to the north-east and midwinter sunset to the south-west.

Thanks to Richard Bradley's work, archaeologists have long been aware of the potential for re-use of natural features in prehistoric monument-building (Bradley 2000). We are also well aware of people's capacity

– prehistoric and otherwise – to rediscover previously abandoned sites and to re-invent traditions. The absence of microliths and other diagnostic Mesolithic flintwork of the 7th–5th millennia BC from Stonehenge or its immediate environs must raise the possibility that this natural solstice alignment was discovered not once but perhaps twice or more. There is at present no explanation at all as to why Early Mesolithic post-erectors chose to mark this spot on Salisbury Plain – it is not elevated or otherwise unusual – and perhaps the solstice-aligned ridges and associated periglacial stripes in the land's surface are an explanation of why posts were erected at this particular place. But the question of the motivation behind this Mesolithic monumentality must remain open.

A rather more satisfactory direction of investigation may be to consider how the builders of Stonehenge drew upon knowledge and traditions from a wide variety of locations across Britain. In that way, we may be able to understand what Stonehenge was built for and why it was both spectacular and unique. Rather than starting with the monument itself, it is better to begin by outlining the broader social and political context of the 4th and 3rd millennia BC.

The date and location of the arrival of farming in Britain remain disputed. Four principal hypotheses posit:

- migrations from different parts of the continent to western and eastern Britain (eg, Sheridan 2010),
- migrations to southern England and southern Scotland (eg, Collard *et al.* 2010),
- migration and indigenous integration starting in south-east England (eg, Whittle 2007),
- indigenous adoption by British hunter-gatherers (eg, Thomas 2008).

Regardless of which theory may be closest to the truth, the arrival of farming is likely to have involved sustained contact involving different ethnicities, languages and material cultures, leading to diverse regional and territorial groupings. That would certainly seem to have been the outcome in the centuries after 4000 BC, when Britain can be seen to have been divided into a series of 'provinces' or regionalisms on the basis of ceramic styles, burial monuments, funerary rites and ceremonial monuments (eg, Darvill 2010, figs 33, 37 & 39).



Whether that regionalism also extended to linguistic and ethnic divisions is currently unknown although developments in ancient DNA analysis hold great promise for the future. In the meantime, back-projection of genetic patterning from modern DNA by Sykes (2006) and Oppenheimer (2006) has led them to propose that, whilst the majority of British people are descended from Early Holocene hunter-gatherers who arrived in Britain and Ireland long before farming, others have genetic inheritances from the continent which these geneticists equate with the arrival of farming. Both infer a movement of people from Iberia and the Atlantic coast into Ireland and western Britain (Sykes 2006, 330), whilst Oppenheimer also proposes an influx from Germany into eastern Britain and even a migration from Scandinavia into northern Scotland (2006, 243–5, fig. 5.4). Archaeologists, on the whole, remain suspicious of such inferences and their molecular-clock chronologies but they cannot be simply dismissed.

Britain might well have been divided ethnically and politically into east and west, with territorial tensions occasionally turning to violence. It is interesting that, although warfare might have been endemic across much or all of this island, the principal evidence for aggression and defence comes from causewayed enclosures in central southern England (Crickley Hill; Dixon 1988 and Hambledon Hill; Mercer & Healy 2008) and the south-west (Hembury and Carn Brea; Mercer 1999) as well as being revealed by skeletal injuries found especially in central southern English and south Welsh tombs (Schulting & Wysocki 2005; Smith & Brickley 2009, 102–12).

By the time that Stonehenge was first constructed, in 3000–2920 cal BC, the regionalisms of Britain's Neolithic population had been substantially eroded. New, exclusively insular styles of monuments and ceramics made their appearance around or shortly after the middle of the 4th millennium BC. Whereas the monumental styles of the early 4th millennium – passage tombs, portal dolmens, long barrows and causewayed enclosures – are of types with ultimately Continental ancestry, the cursus monuments are specifically British with likely origins in Scotland (Thomas 2006). Similarly, the various forms of Peterborough



*Figure 4.3: The excavation across the Stonehenge Avenue in 2008, showing the parallel ridges beneath the avenue's banks (photographed by Adam Stanford of Aerial-Cam)*

Ware had a wide currency across most of Britain as did other Impressed Wares across Ireland. This divergence from Continental traditions and influence continued with the development of circular enclosures (firstly with internal banks and external ditches, such as Llandegai Henge A in north Wales (Lynch & Musson 2004), and later as henges with external banks; Harding 2003; Burrow 2010) and the invention of Grooved Ware.

After 3000 BC, and by 2500 BC, Grooved Ware became universally adopted across Britain, even extending into eastern Ireland (Cleal & MacSween 1999). It is the first ceramic style that can be considered fully 'British'. Whilst there are differences in decoration between, say, Orkney and Durrington Walls, the decorative motifs broadly defy any identification of regional sub-styles (*ibid.*). Other geographical uniformities in material practices have also been recognised. Cremation appears to have become the dominant funerary rite across most of Britain after 3000 BC (Parker Pearson *et al.* 2009). Circular enclosures and henges (Burrow 2010; Gibson 2010, 242–6) also appear widely, from Llandegai in north Wales to the Stones of Stenness in Orkney to Flagstones in southern England.

One of the most striking aspects of this geographical reach of a pervasive cultural 'style' or 'package' is the form of the domestic house. Round-cornered square dwellings excavated at Durrington Walls (Parker Pearson 2007) have an uncanny similarity in ground plan, interior layout and size to those at Skara Brae (Childe 1931) and elsewhere in Orkney, some 700 miles away. Given the occurrence of similar structures at Trelystan in Wales (Britnell 1982)

and at Over in eastern England (C. Evans, pers. comm.), it would seem most likely that these similarities are best explained as shared aspects of a common culture (rather than the product of an Orcadian invasion of Stonehenge; see Thomas 2010).

Of course, shared material culture need not imply a common ethnic, linguistic or political identity, let alone a shared cultural identity. Yet the example of house forms reveals that the intimate practices of daily life were shared over long distances, such that a Neolithic traveller going from one part of Britain to another would have been instantly at home in such a dwelling, familiar with the locations of furniture and the uses of that interior space. Similarly, the widespread adoption of cremation indicates the employment of common cultural beliefs and concomitant practices rather than merely the adoption of material items. The same may be said for the use of Grooved Ware within contexts of feasting and timber monumentality. We may infer a growing commonality of cultural practices across a widening territory within Britain, suggestive of a changing conception of identity and belonging.

These transformations from regionalism to an island-wide material culture may thus mark a significant cultural change. It is interesting that Stonehenge's first two stages were built during this period of a widening pan-British commonality of practices. Could the building of Stonehenge have been a political act of union, creating or formalising the concept of a unified Britain?

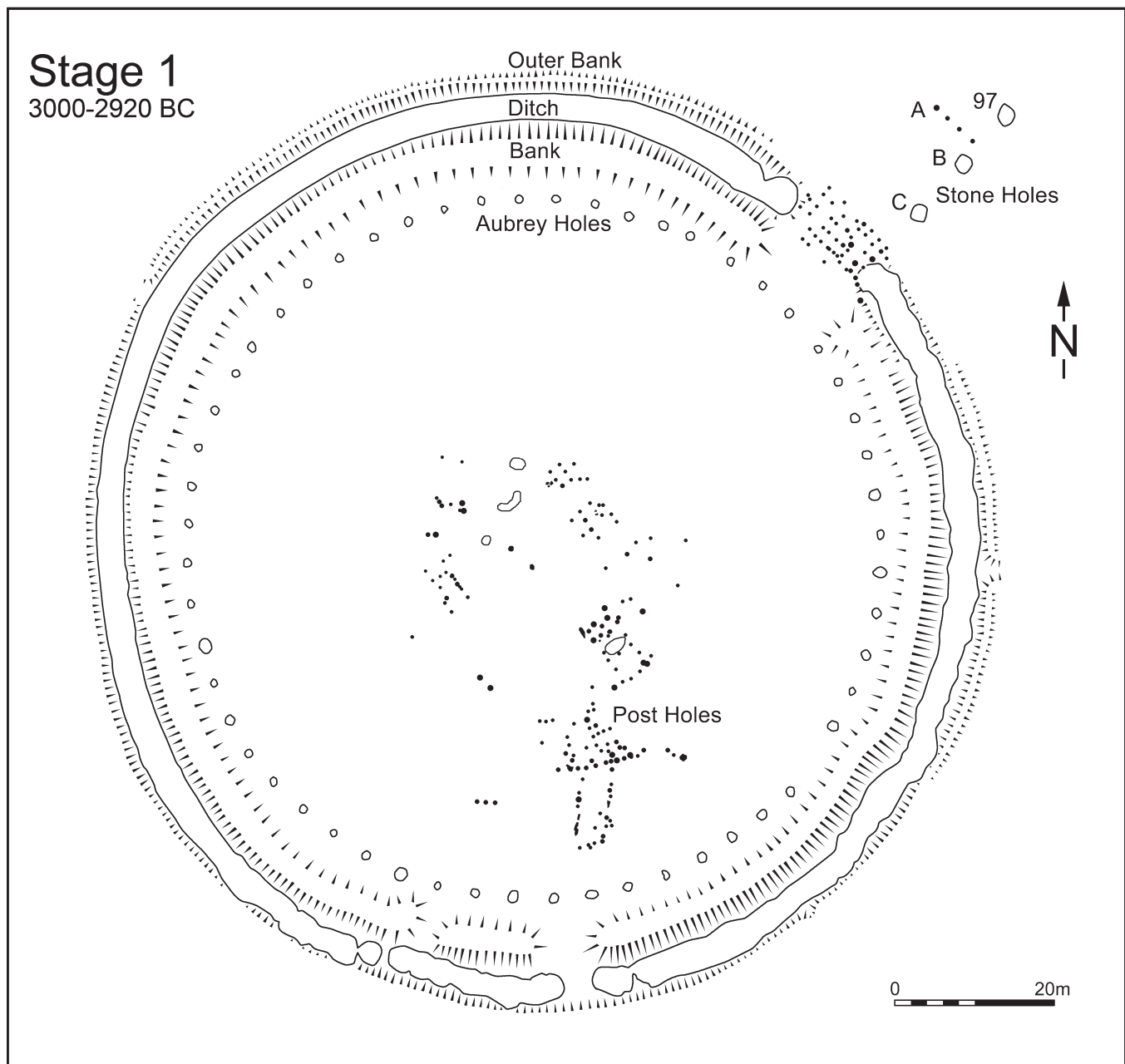
Stonehenge has long been recognised as ritually or ceremonially important in relation to its solstice axis. It is also clear that many of the monuments in close vicinity to the stone circle also incorporated solstitial alignments into their design and layout: the Stonehenge Avenue (Cleal *et al.* 1995, 291–329), the Durrington Walls Avenue (Parker Pearson 2007, 130–3), Coneybury henge (Richards 1990, 123–58), Woodhenge (Cunnington 1929), the Southern Circle (Wainwright with Longworth 1971, 23–38), the Northern Circle (Wainwright with Longworth 1971, 41–4) and Durrington 68 (Pollard 1995) all have a solstitial element in their construction (Ruggles pers. comm.; Parker Pearson *et al.* 2007). Additionally, there is evidence that certain lunar alignments were important at

Stonehenge. Clive Ruggles has pointed to the alignments in the north-east entrance of the enclosure during the monument's Stage 1<sup>1</sup> (Fig. 4.4) being roughly in the direction of major northern moonrise (1997). Similarly, he argues for the four Station Stones (assigned to Stage 2)<sup>2</sup> forming an axis towards major southern moonrise. Whilst some consider this to be evidence of Stonehenge's purpose as a prehistoric observatory or calendar, other explanations are more persuasive. The coincidence of full moon rise and set at its southern and northern limits with midsummer and midwinter has been noted by Ruggles (1997) and this chimes with the identification of peaks in the slaughter of pigs at these two times of the year at nearby Durrington Walls (Parker Pearson *et al.* 2011).

With the evidence now firmly pointing towards the Neolithic recognition (and presumably celebration) of both midwinter and midsummer – moments at the shortest and longest days – the marking of the path of the sun along the natural ridges outside Stonehenge might also be considered as the linking of earth and sun, making the location of Stonehenge an *axis mundi*. Thus the significance of the position of Stonehenge might well have stemmed from the fact that it was considered to be an origin point where earth, sun and moon were represented in cosmological unity. It is possible that the architectural plan of the circular enclosure (and the circular sarsen circle of Stage 2; Fig. 4.5) were metaphorical expressions of the two heavenly bodies (Parker Pearson & Ramilisonina 1998).

If Stonehenge was a monument of cosmological unification – an interpretation we can base on its location and alignments – the provision of stones adds a further dimension. The case for the stones representing ancestors has been sustained and strengthened over almost a decade of new fieldwork (Parker Pearson & Ramilisonina 1998; Parker Pearson *et al.* 2006). We are now finally in a position to ask 'whose ancestors?' (Whittle 1998).

Whilst an argument has been made for the value of the Welsh bluestones as deriving from their imagined healing properties (Darvill & Wainwright 2009), this theory fails to explain why, *inter alia*, bluestones were not transported to any other megalithic sites across Britain (Parker Pearson *et al.* in press b). Recent excavation at Stonehenge, together with archive



study of earlier investigations, has provided evidence that bluestones were erected in the Aubrey Holes during Stage 1 (Parker Pearson *et al.* 2009; 2010). This suggests that the incorporation of these megaliths from 140 miles (*c.* 225 km) away was a necessary element of Stonehenge's initial construction, along with some of the more local sarsens that can now be attributed to Stage 1.<sup>3</sup> What could have been the purpose of combining two different lithologies within the same *axis mundi*?

Perhaps the bluestones were brought from Preseli in Pembrokeshire because they represented an ancestral origin for some of the people of Britain. This part of Wales may be the first place in Britain where farming took hold, introduced by people arriving from Europe's Atlantic seaboard. Alison Sheridan has argued that the styles of the megalithic tombs of Carreg Samson (Fig. 4.6), Hanging Stone and Parc y Llyn in Pembrokeshire are derived from the closed chamber tombs of the Morbihan

Figure 4.4: Stonehenge in Stage 1 (drawn by Irene Deluis)



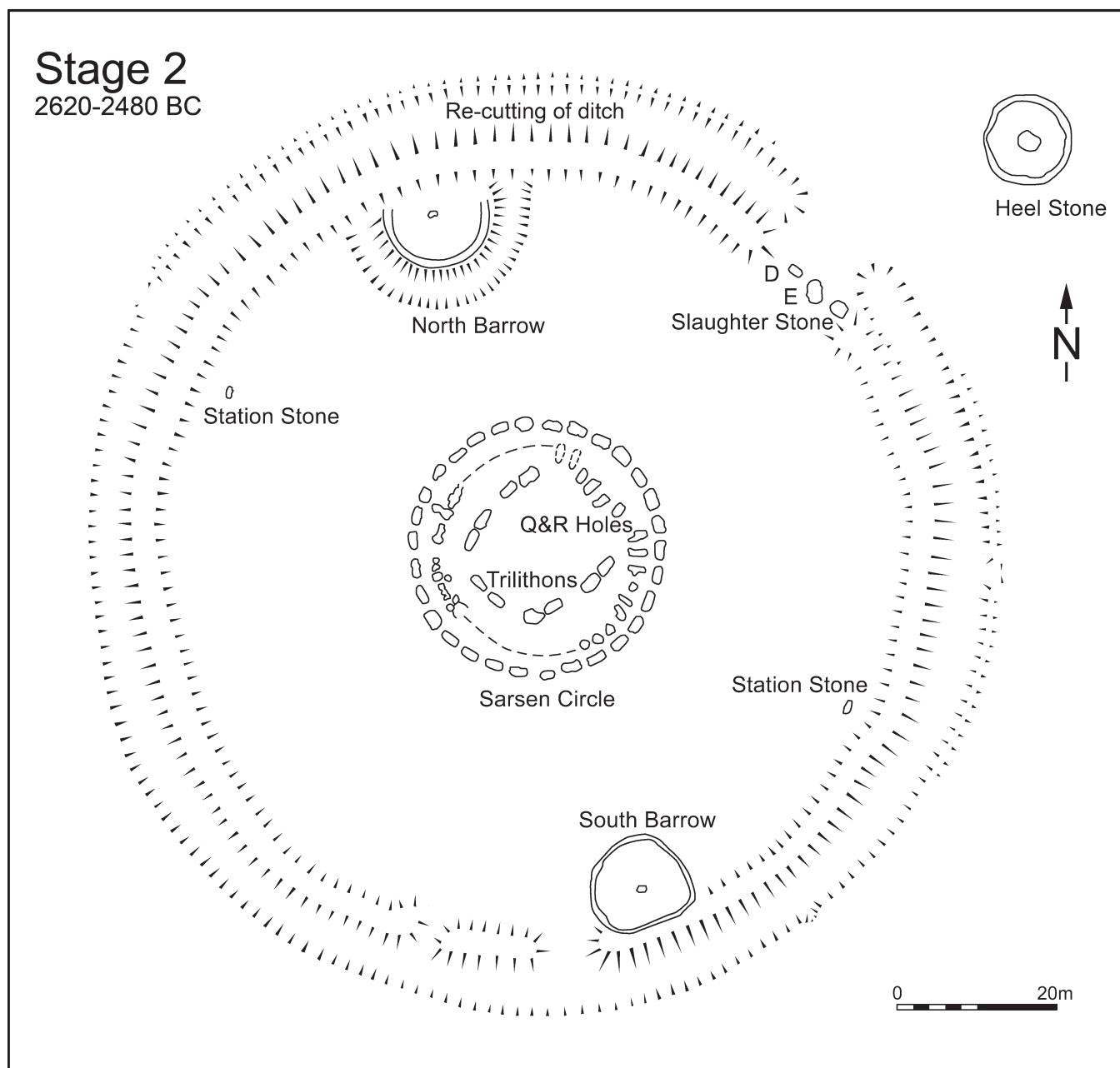


Figure 4.5: Stonehenge in Stage 2 (drawn by Irene Deluis)

in Brittany, dating to 4300/4200–4000 BC (Sheridan 2010, 92). She also identifies the ceramic vessel inside Carreg Samson as a Breton style of the same period (*ibid.*; Lynch 1975). Recent research in 2011 leads me to suspect that the bluestones came not from the high ground on top of Preseli but from the upper Nevern valley on the northern flank of Preseli (Fig. 4.7); here they may have stood as one or more stone circles in association with a large henge,<sup>4</sup> a hypothesis to be explored in future years. The dismantling of these stone

circles and their removal to Stonehenge and Bluestonehenge in Wiltshire (Parker Pearson *et al.* 2010) could then be considered as a major act of unification. It would have brought together the peoples of western Britain and eastern Britain around 3000 BC in a Herculean project that united the two territories and moved these ancestral symbols of western British authority to the centre of spiritual, political and ancestral power at Stonehenge.

In this light, the material significance of the sarsens may be that they represented the

*Figure 4.6: The closed chamber tomb of Carreg Samson, Pembrokeshire (photographed by Mike Parker Pearson)*



*Figure 4.7: The Neolithic quarry at Craig Rhosyfelin, north of Preseli in Pembrokeshire, was a source of one of the types of rhyolite found at Stonehenge (Ixer & Bevins in press); excavation in 2011 by the Stones of Stonehenge Project revealed a monolith awaiting transportation (photographed by Adam Stanford of Aerial-Cam)*



ancestries of people in eastern and central southern Britain, whether of indigenous hunter-gatherers or of immigrant farmers arriving in the south-east. It may be pertinent that the earliest megalithic tombs built in south-eastern Britain – the Medway tombs in Kent – were built of sarsen, though no analyses have ever been done on the Stonehenge sarsens to establish whether any of the stones derive from Kent as opposed to Wessex. Radiocarbon dating of human bones inside the

tomb of Coldrum places these Early Neolithic inhabitants of Kent in the first two centuries after 4000 cal BC (Whittle 2007, 382).

In conclusion, we now have a revised hypothesis for Stonehenge's construction as a monument of cosmological and cultural unity for earth, sun, moon and people.<sup>5</sup> After a millennium of cultural and possibly ethnic diversity, the people of Britain developed new identities that no longer referenced continental ancestries and which fostered specifically



insular relationships. Stonehenge (Stage 1) was built at the time that material culture styles were becoming widespread across large areas of Britain. After centuries of diversity and conflict, it could have served as a uniting political force.

The builders of Stonehenge were also architects of a new identity that could be considered British. By 2500 BC, when Stage 2 was built, this sharing of distinctly insular material culture had become island-wide. Perhaps the impetus for the remodelled and impressive Stonehenge of Stage 2 came from the resumption of interaction with the European mainland. Copper metallurgy could possibly have become known in Britain at this time (Parker Pearson 2008) and profound social changes were in the wind in the form of the Bell Beaker transition which took place after 2470 cal BC (Needham 2005). Might Stonehenge Stage 2 have been a legitimisation statement for reasserting the political unity of the British at the very moment that this unity was threatened? Subsequent rebuilds (Stages 3–5)<sup>6</sup> can be similarly interpreted as successive attempts to assert unity in the face of growing social and cultural diversity, a theme first suggested over a decade ago by Richard Bradley (1998, 99–100).

The later Neolithic of the late 4th and 3rd millennia BC has generally been perceived as a continuation of the earlier Neolithic but it can now be considered as the development of a very different world. This was a time of cult activities in which thousands of people were caught up in millenarian-like building projects, coming together from different parts of Britain and thereby participating increasingly in a shared culture and lifestyle. Certain places and locales, particularly those with long traditions of gathering and building, developed special significance, thereby attracting people for labour and feasting. Ultimately, this was not to last. The Bell Beaker period was a phase of transition during which ancient places of cult became obsolete, replaced by social networks of exchange and long-distance contact. Stonehenge was once perhaps the centre of the world but that world passed away with Britain's growing involvement in Europe during the Bronze Age.

## Notes

- 1 Stage 1 begins with the digging of the ditch (3000–2920 cal BC) and includes the ditch and bank, Aubrey Holes, and various other stone holes and post holes (Parker Pearson *et al.* in press a).
- 2 Stage 2 dates to 2620–2480 cal BC and includes the Station Stones, the sarsen circle and trilithons as well as the bluestones in their arc of Q and R Holes (Parker Pearson *et al.* in press a).
- 3 The argument for the movement of bluestones by glaciers has been made by some writers. However, the most recent syntheses of evidence for the extents of all previous glaciations conclude that ice sheets never reached as far as central southern England (Clark *et al.* 2010; Gibbard & Clark 2011).
- 4 Geophysical survey of the hillfort of Castell Mawr, Meline (Mytum & Webster 2003) reveals that it may have reused the earthworks of a Neolithic henge. If so, this is the largest henge in Wales, located close to the bluestone sources.
- 5 In his sixth edition of *The Dawn of European Civilization*, Gordon Childe wrote of moving the bluestones to Stonehenge: 'This fantastic feat ... **must illustrate a degree of political unification or a sacred peace ...**' (Childe 1957, 331). Like characters in David Lodge's novel about academic life, *Changing Places*, I must admit to not having read a seminal work (in this case, *The Dawn*) – I chanced upon the quote while leafing through Childe shortly after this paper was written.
- 6 Stage 3 (construction of inner bluestone circle inside the horseshoe of sarsen trilithons, followed by digging of a large pit in the centre of Stonehenge; digging of ditches for Stonehenge Avenue) dates to 2480–2280 cal BC; Stage 4 (replacement of bluestones in Q & R Holes by outer bluestone circle, and of inner circle by inner oval of bluestones) dates to 2270–2020 cal BC; and Stage 5 (Y and Z Holes) dates to 1630–1520 cal BC.

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# The Stonehenge Landscape Before Stonehenge

*Colin Richards and Julian Thomas*

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*Richard Bradley (1991) pointed to a need to understand the apparently ‘changeless’ character of Stonehenge in the context of its changing surrounding landscape. But we can also go further, and argue that Stonehenge represents the culmination of a process of landscape formation composed of special places and connecting route-ways, which was created over a period of many centuries. Here, those strands of earlier activity, involving occupation, monument building, and the creation of the earliest megaliths, are followed. It is argued that the shift from Early to Late Neolithic in the Stonehenge landscape involved a change from one mode of sociality to another, and this required a renegotiation of the relationship between the living and the dead, expressed through the character of monumentality. We can now identify the construction of Stonehenge as belonging to a critical moment in a process of social transformation.*

## Introduction: locating Stonehenge

Stonehenge is an iconic national symbol, and over the centuries it has been interpreted in a variety of ways, by different communities: as the product of giants or magicians, as a druid temple, as a calendar, or an astronomical observatory, or as a flying saucer landing site. Regardless of merit, what all of these interpretations share is a tendency to see Stonehenge in isolation, and to concentrate on its internal structural organisation. In a memorable contribution, Richard Bradley (1991, 217) pointed to a need to understand the apparently ‘changeless’ character of Stonehenge in the context of its surrounding landscape. An orientation on the past in ritual life needs to be set against the pace

of change in society at large. In this spirit, the objective of the Stonehenge Riverside Project (SRP) has been to present the monument as one element in an elaborate constructed landscape, to the extent that Stonehenge and Durrington Walls can be identified as parts of a single integrated complex (see Parker Pearson this volume). But we can also go further than this, and argue that Stonehenge represents the culmination of a process of landscape formation composed of special places and connecting route-ways, which was created over a period of many centuries.

Arguably, that process can be traced back into the Mesolithic, and a series of post-holes that were discovered during the construction



of Stonehenge car-park, and which appear to have held massive pine uprights (Allen & Gardiner 2002, 141). These are dated to the 8th millennium BC, and have sometimes been interpreted as the equivalent of Native American totem poles. However, three of the posts form an alignment terminating on a tree-throw hole, and when this alignment is plotted onto the map its eastward extension points toward Beacon Hill, near Bulford, an outstanding natural eminence and the highest point in the landscape surrounding Stonehenge (Tilley *et al.* 2007, 186–90). It follows that the post alignment, itself composed of a series of tree-trunks, integrated two potentially significant elements of the local topography, a large tree and a pre-eminent hilltop.

However, another point can be suggested. Most of the existing traces of Mesolithic activity in the Stonehenge landscape are concentrated in the river valleys. There are microlithic assemblages from the west bank of the Avon, below Durrington Walls; from a pit at Countess Farm; and from the SRP excavations adjacent to the Avon at West Amesbury. So it is arguable that Mesolithic hunting bands used the valley system to move around the landscape of Salisbury Plain. The easiest way of crossing between the valleys of the Till and Avon is to travel up the defile of Winterbourne Stoke Down towards Airman's Corner, and from there to walk across to Durrington. Following this route, Beacon Hill provides a consistent landmark on the horizon, potentially rising above any vegetation. So it may be that the Stonehenge car park post-holes formalised an important axis of movement. Within this same band of country, between the Till and the Avon, small pits of probable Mesolithic date have been located beneath the round barrow Winterbourne Stoke G30, and beneath the bank of Woodhenge (Christie 1963, 377; Pollard & Robinson 2007). So already during the Mesolithic, pits, posts, sacred trees and topographic features were being knitted together to form a web of paths and places that would continue to develop over the subsequent centuries.

### Introducing the Neolithic

The beginning of the Neolithic saw the introduction of new practices, new species, and new artefacts into this network, rather

than an immediate reconfiguration of the landscape. One of the earliest traces that we have of Neolithic activity in the area is a massive pit on Coneybury Hill, overlooking the Avon valley. The so-called 'Coneybury Anomaly' contained large quantities of cultural debris, deposited with some formality (Richards 1990, 40). The presence of large amounts of wood charcoal and the meat-bearing bones of seven roe deer, suggest that some kind of feast may have taken place here. But everything else about Coneybury seems fragmentary and incomplete. Although much of the material may have previously lain in a midden, both the pottery and the flints seem to have been drawn from larger assemblages, and it is argued that ten cattle, a pig and two red deer were butchered on site and their meat taken away for consumption elsewhere. All of this speaks to us of a set of practices that were dispersed across the landscape, rather than focused on a permanently-occupied settlement.

On a smaller scale, we can see similar deposits of early Neolithic feasting debris at the Cuckoo Stone, to the immediate west of Woodhenge, and beneath the bank at Woodhenge itself. It is quite clear that a number of natural sarsens lay scattered across Salisbury plain (see Bowen & Smith 1977; Green 1997, 261–3; McOmish *et al.* 2002, 152), running even further south than the site of Stonehenge, where at least one massive sarsen (the Heel Stone) lay exposed. In this southern Wiltshire landscape sarsens like the Cuckoo Stone were anomalous, and consequently appear to have provided special places for episodes of food consumption and material deposition.

In the case of Woodhenge, the SRP's excavation revealed a tree-throw hole, which had been 'lined' with sherds of carinated bowl before quantities of cattle bone had been dumped on top, and the hole had finally been capped with a cairn of compact chalk (Pollard & Robinson 2007). The non-trivial character of these episodes of consumption is demonstrated by the way that both Woodhenge and Coneybury were much later chosen as the locations for the construction of henge monuments. This raises the possibility that these events lived on in memory for many generations. But at the same time, it is worth considering that these places owed their longevity to the way that early episodes of activity served to reconfigure habitual routes and pathways across the

landscape, by establishing the significance of particular places.

Sites like the Coneybury Anomaly, dating to the very beginning of the 4th millennium BC, form part of what is increasingly being recognised as a 'pre-monumental' Neolithic, at least in the south of Britain (Whittle *et al.* 2011, 719). In this area, earthen long barrows and long cairns appear to have emerged at around 3800 BC (Whittle *et al.* 2007a, 125). However, it also seems that these long mounds often amounted to 'closing statements', built at the end of long sequences of activity that might include the digging of pits, the burning of hearths, and various activities focused on the remains of the dead. So while monument-building might not everywhere have begun at the start of the Neolithic, a new set of practices which often culminated in construction was integral to the Neolithic way of life from its inception.

There are around twenty long barrows in the immediate area of Stonehenge, concentrated in particular on Wilsford and Normanton Downs, and the area around the causewayed enclosure of Robin Hood's Ball, to the north (RCHM(E) 1979, 1; Richards 1990, 265). On Salisbury Plain in general, the many long mounds opened by Cunnington, Colt Hoare and Thurnam during the 19th century contained a mixture of articulated and disarticulated skeletons, often apparently contained in linear timber mortuary structures like that identified in the later excavation at Fussell's Lodge (Ashbee 1966, 75–8; Ashbee 1970, 143–6). Both within these timber structures and in the chambers of contemporary long cairns, there are strong indications that bodies were laid out and allowed to decompose, before being reorganised, and in some cases individual bones may have been taken away or brought from elsewhere (Wysocki *et al.* 2007, 69). While past arguments concerning the extent of 'bone circulation' may have been overstated, it is clear that the remains of the dead were to some extent accessible to the living during the earlier part of the Neolithic. However, as the period progressed it is possible to identify a series of processes by which a greater conceptual distance was established between the living and the dead. The passages and chambers of the long cairns were blocked up, terminating access to the human remains that they contained. Some long barrows

were constructed in which the ditch entirely surrounded the mound, rather than simply flanking the two sides. And while new long mounds continued to be constructed in some areas until the middle of the 4th millennium BC (Whittle *et al.* 2007b, 117) bodies also began to be buried in pit graves beneath mounds, rather than timber chambers, so that protracted access to the decaying remains was no longer possible (Thomas 2000, 665).

These graves tend to contain only one, two or three bodies, and they are sometimes found beneath relatively small, oval mounds. An appreciable proportion of the long mounds in the immediate vicinity of Stonehenge are of this kind, and barrows such as Winterbourne Stoke 1 and Figcheldean 31 contained only a single, articulated skeleton, sometimes associated with grave goods, such as the unusual flint nodule from Winterbourne Stoke (Darvill 2006, 84–5). The change is from the gradual accumulation of an undifferentiated mass of ancestral bones, to the memorialisation of the death of a specific person, and from ancestors who are 'here with us in the present', to a different kind of ancestor in the past, from whom we can claim descent. As authors like Nick Thorpe have argued, it seems likely that this development is connected with the emergence of socially pre-eminent groups toward the end of the earlier Neolithic (Thorpe 1984, 58). However, this established narrative of change in Neolithic mortuary practices is complicated by the complex relationships between a series of different traditions of Early Neolithic monuments.

### ***Long enclosures and long houses***

In southern Wessex, earthen long barrows are often associated with a variety of long enclosures, ranging in size from small 'mortuary enclosures' up to massive cursus monuments, the largest of which, the Dorset Cursus, is 10 km long. In the late 19th century General Pitt Rivers discovered such an enclosure beneath the long mound at Wor Barrow in north Dorset, with a funerary deposit located in some form of chamber inside it (Pitt Rivers 1898, 24). Largely as a result, these enclosures are often assumed to have been principally funerary in character, perhaps intended for the exposure of the dead prior to their interment in a chamber. However, they rarely produce any human remains, and it may be too simplistic to

see them as 'unfinished' long barrows. Putting them into context requires something of a digression.

One of the distinctive manifestations of the earliest Neolithic in Britain is a series of large timber halls. Although people may have lived in them some of the time, they probably amounted to more than simply domestic dwellings (Brophy 2007). In particular, they seem to be connected with storage, periodic gatherings, and feasting on the part of communities who may not have been resident in a single location year-round. As such, halls were at once functional structures, and a powerful symbol of the social collectivity. As time progressed, the symbolic aspect of these structures appears to have been elaborated to create two distinct kinds of monuments, both of them concentrated primarily in Scotland (Thomas 2006, 234; Noble 2006, 46). Firstly, there were timber cursus monuments, massive rectilinear enclosures composed of wooden uprights. These could be seen as an expansion of the idea of the hall to provide a large, permeable, performative space. However, they may have been quite short-lived, in some cases possibly being constructed with a specific event in mind, and destroyed soon afterwards. Like the timber halls that overlap with them in time, timber cursuses were often deliberately burnt down after use. Timber cursuses date to the period between 3700 and 3500 BC, and were eventually replaced by ditch and bank cursuses, which are often much larger in scale. The relationship between the two is vividly represented at Holywood North near Dumfries, where a burnt-down timber monument was later enclosed within a bank and ditch (Thomas 2007a, 166). Some ditched cursuses have entrances, and could have been entered, but others seemingly render a linear area of space inaccessible. It may be that these monuments were sometimes less concerned with providing a space for performance, and more with commemorating or sanctifying events or activities that had already taken place (Johnston 1999, 46). The important point is, though, that this was achieved within a form that connoted the timber hall, and by extension the extended community.

The second monumental tradition that drew on the hall idea is a series of unroofed timber structures, such as the ones inside the early henge monument at Balfarg Riding

School in Glenrothes (Barclay & Russell-White 1993, 169). These have sometimes been interpreted as exposure platforms, but again without any human remains having been associated with them. Kenneth Brophy (2007, 91) has suggested that these monuments are actually representations of the burnt-out shell of a timber hall, after its destruction by fire. He points out that in some cases the ground-plans of halls and timber enclosures are virtually identical, despite their structural differences. So here again, the house as a symbol of collective identity has been isolated from its role in everyday settlement and subsistence, in a fashion similar to that discussed in another context by Bradley (2001, 89).

In the Stonehenge landscape there are three long enclosures, of various sizes, the smallest of which is the so-called long mortuary enclosure on Normanton Down (Vatcher 1961, 162). This is only 37 m in length, and it is notable that its overall form bears some similarity to that of the timber halls. Indeed, the plan of the hall at Balbridie, although considerably smaller, can be precisely superimposed on that of Normanton Down. Like the Wor Barrow enclosure, the entrance to the Normanton structure seems rather elaborate, drawing attention to the process of entering and leaving its interior space. This implies that, like a timber hall, the Normanton enclosure was intended as a space that people could enter, in appreciable numbers, rather than purely a funerary structure. It is therefore interesting that the oval barrow Amesbury 14 is located immediately north of the Normanton enclosure (see Vatcher 1961, pl. ix). The implication is that whatever was contained (or took place) within the enclosure was sanctioned and rendered significant both by an architectural form which connoted tradition and the collective, and by proximity to the dead.

This paired relationship seems to hold for all of the long rectangular enclosures in the Stonehenge area. The oval barrow Winterbourne Stoke 35 lies immediately to the west of the Lesser Cursus (Darvill 2006, 86), while the massive long mound Amesbury 42 runs parallel with the eastern terminal of the Greater Cursus (see below). Indeed, this is a relationship that we can recognise elsewhere, as with the long mound and long enclosure at West Cotton in Northamptonshire, although the latter is a little later in date (Harding &





*Figure 5.1: The Greater Stonehenge Cursus, seen from the west (Photo: Kate Welham)*



*Figure 5.2: Section of the ditch of the Greater Cursus, 2007, showing the massive v-shaped recut, cutting across the 'embayment' on the left side of the picture (Photo: Julian Thomas)*



Healy 2007, 94). So it is possible that around the middle of the 4th millennium BC, as bone reorganisation and disarticulation were giving way to single grave burial and ultimately to cremation burial, the relationship between the living and the dead was reaffirmed by placing structures that referred to the collective identity of the community in juxtaposition to the monuments of the dead. If the remains of the dead could no longer be directly encountered, celebration or veneration could take place in their proximity.

### *The Greater Stonehenge Cursus*

It is in this context that we can consider the results of the recent fieldwork at the Stonehenge Cursus, the largest of all the monuments in the Stonehenge and Avebury World Heritage Site, at 3 km in extent (Fig. 5.1). The Cursus links the two local eminences of the King Barrow Ridge and Fargo Hill, dipping down into Stonehenge Bottom in between. As noted above, the western end of the Cursus contains a probable Mesolithic pit, and this hints at the possibility that the structure encloses or formalises a very long established pathway. It has long been recognised that in contrast to other cursus monuments the two sides of the Stonehenge Cursus are not truly parallel, and that the southern ditch bows outwards toward the western end. It was in the process of excavation, walking back and forth between the trenches, that the authors realised that the western part of the southern ditch was actually aligned on Beacon Hill, before swinging round to the north as the ditch rises onto the King Barrow Ridge. So clearly a landscape referent that was already very ancient was incorporated into this monument.

The SRP excavations on the Cursus ditch confirmed Patricia Christie's observation that the feature was more extensive at the two terminals, and would have provided material for a larger bank at either end (Christie 1963, 370). This is rather similar to the situation at the Thickthorn terminal of the Dorset Cursus, where the massive terminal bank appears to echo the two long barrows that are aligned on it (Barrett *et al.* 1990, 50). There were suggestions in several places that the ditch had been cleared out on at least one occasion, and there were two distinct phases of recutting. When J.F.S Stone excavated at the Cursus in 1947, he identified a 'recess' or 'embayment' cut back into the

side of the ditch, from which he recovered a large piece of red deer antler (Stone 1947, 14). This later produced a radiocarbon date in the second quarter of the 3rd millennium BC, which promoted the erroneous notion that cursuses were a Late Neolithic monument type. This idea survived in the literature for some while, for two reasons. Firstly, cursuses are often found within complexes of monuments that also include later structures, such as henges, round barrows and ring ditches. Secondly, when Colin Renfrew published his important article, 'Monuments, mobilisation and social organisation in Neolithic Wessex', he appeared to cast some doubt on the early Neolithic date of cursus monuments in general, and the larger cursuses in particular. Such massive works were unlikely to have been built at this time, given the amount of labour involved in their construction, unless they were created in a series of stages (Renfrew 1973, 549). Implicitly, the Greater Stonehenge Cursus and the Dorset Cursus represented a challenge to Renfrew's argument that the gradually increasing scale of monuments throughout the Neolithic reflected the growth of population and social hierarchy.

In a trench opened adjacent to Stone's another feature similar to his 'embayment' was identified, clearly cut through the primary chalk rubble of the ditch fill. This indicates that a series of bowl-shaped recuts were dug into the ditch in the earlier 3rd millennium BC, during the early history of Stonehenge. Subsequently, these were cut across by a more extensive, continuous, V-shaped recut, which bit into the base of the ditch (Fig. 5.2). This produced sherds of Beaker pottery and barbed-and-tanged arrowheads. Evidently, all or part of the perimeter of the Stonehenge Cursus had been reinstated on a number of occasions, and this tells us something about the enduring significance of the structure. However, this importance seems paradoxical, given that the Cursus seems to enclose nothing at all. In 2007 and 2008, a series of excavations in the Cursus interior were undertaken, targeted at anomalies revealed by geophysical survey. In no case was anything more substantial than a series of root-holes encountered (Thomas *et al.* 2009). Nor has the Stonehenge Cursus produced quantities of food residues or material culture comparable with those found at either henges or causewayed enclosures. This might suggest

Lab code	Material & context	Date BP	Date cal. BC 95.4% confidence level	<sup>13</sup> C relative to VPDB
OxA-1402	Coneybury Anomaly, bone from context 2538	5050±100	3950–3790	-21.0
OxA-1407	Netheravon Bake long barrow	4760±90	3640–3520	-21.0
OxA-15254	Robin Hood's Ball enclosure, sherd residue	4732±30 4765±40	3640–3370 3650–3370	-27.0 -29.9
GrA-30038	Robin Hood's Ball enclosure, sherd residue			
OxA-1400	Pit outside Robin Hood's Ball enclosure, bone	4740±100 4500±120	3710–3340 3510–2910	-21.0 -21.0
OxA-1401	Pit outside Robin Hood's Ball enclosure, bone			
OxA-17953	Greater Cursus, antler, base of cursus ditch, Tr 26	4716±34 4695±34	3632–3375 3630–3370	-21.70 -21.59
OxA-17954	Greater Cursus, antler, base of cursus ditch, Tr 26	4100±90	2840–2580	-21.0
OxA-1403	Greater Cursus, antler from Stone's excavation			
OxA-20594	Amesbury 42 Long Barrow, antler, base of ditch	4698±33 4645±30	3630–3371 3520–3360	
SUERC-24308	Amesbury 42 Long Barrow, antler, base of ditch	4520±32	3357–3100	-21.75
OxA-21961	Amesbury 42 Long Barrow, human bone from ditch			
OxA-1405	Lesser Cursus Ph. 2, antler	4640±100	3500–3360	-21.0
OxA-1404	Lesser Cursus Ph. 1, antler	4550±120	3360–3130	-21.0
OxA-22238	Lesser Cursus, antler	4611±32	3500–3340	-22.04

*Table 5.1: Relevant radiocarbon dates for the Stonehenge area*

that the structure was a processional way rather than an enclosure set aside for feasting and gathering. Yet it is notable that unlike the Normanton enclosure, the Cursus has no formal entrance at either end. In order to enter the interior any procession would have to climb down into the ditch and up over the bank, and this would hinder any stately or solemn progress. In the context of the Dorset Cursus, Robert Johnston has argued that what was being enclosed was a pre-existing pathway, actually rendering it inaccessible. Henceforth, the interior of the Cursus would be sanctified, and reserved for the use of the ancestors, the spirits, or the deities (Johnston 1999). What

we might wish to add to this argument is that this reserved space was 'wrapped' in a form that ultimately connoted the house or the hall, and which was positioned in proximity to a long barrow.

Other clues were provided by a further trench at the western terminal of the Cursus. Here the ditch was especially deep, and it was the one place where cultural debris was encountered in any quantity. Throughout the primary chalk rubble, large quantities of flint flakes and cores were found, in discrete knapping clusters. These were not just concentrated on the ditch base, and it appears that as the ditch edge had weathered back over the first



year or two after construction, flint nodules must have been periodically revealed, and knapped. What is particularly remarkable about this activity is that no artefacts appear to have been made at all, and the reduction sequence employed was different from that used in most contemporary assemblages. In the past, when assemblages of this kind have been encountered in ditch deposits, it has been conventional to dismiss them in terms of the 'testing' of nodules recovered in the course of construction, assessing their suitability for tool-making. But the dispersal of these deposits through the primary fill makes it clear that people were repeatedly returning to the ditch in order to carry out more apparently unproductive knapping. Perhaps the problem here lies with our ideas about 'production' as an instrumental process leading towards a finished product. It may be that in this case a particular kind of physical engagement was understood as contributing to the 'making' of a place or structure, where the actual crafting of an artefact would have been inappropriate. In other words, through practices normally associated with creation and transformation, the liberation of the spirit or essence of the stone could have contributed to the meaning of the Cursus, without the need for any artefactual outcome. At the very base of the ditch, below the knapping clusters, the tine of a red deer antler was discovered, presumably part of one of the picks used in digging the ditch. This has since provided a pair of radiocarbon dates, which place the construction of the Cursus securely in the mid-to-late 4th millennium BC (see Table 5.1). However, this leaves unanswered the question of the relationship between the Cursus and the long barrow, Amesbury 42.

#### *Amesbury 42 long barrow*

The massive long mound of Amesbury 42, at nearly 100 m in length the largest in the Stonehenge area, would have crested the King Barrow Ridge, and it seemed likely that the Cursus would have been laid out to run up to it, stopping 30 m short of its side ditch. The barrow is now flattened, and covered by a byway, but it was still standing in the mid-19th century when it was excavated by John Thurnam. Thurnam could find no burials beneath the mound, but he did find an ox skull, and a large number of cattle foot bones,

in full articular order (Thurnam 1869, 180). These *could* be identified as the by-products of feasting on the site prior to the construction of the barrow, but the presence of cattle heads and hooves is a recurring pattern in Wessex long barrows (Ashbee 1970, 158). In some cases, as at Fussell's Lodge, skulls are found in close association with the mortuary deposit. But at the so-called 'cenotaph barrow' of Beckhampton Road in north Wiltshire a series of cattle skulls were laid out beneath a mound that contained no burials at all (Ashbee *et al.* 1979, 245). In a similar way, it is possible that at Amesbury 42 the cattle remains served as symbolic substitutes for human bodies. Elsewhere it has been suggested that this is because of a particularly close relationship between humans and cattle during the earlier Neolithic, where the latter represented not merely an essential form of mobile wealth and social capital, but a mirror of the human community, whose patterns of movement, descent and exchange were a fundamental preoccupation (Ray & Thomas 2003, 41).

If this is the case, we have a situation in which the outward form of a monument to the dead, but which contains no human bones, is built alongside an enclosure which refers to a 'great house' or a hall for communal gathering, which could not actually be entered. Again, the recent excavations were able to throw some light on this. Work by Julian Richards in the 1980s had seemed to suggest that the mound of Amesbury 42 was a two-phase construction, with a first diminutive ditch replaced by much more massive flanking quarries (Richards 1990, 98). If so, the mound must have been considerably enhanced at some point, and it was conjectured that a small long mound on the ridge had been reconstructed at the point when the Cursus had been built, in order to give it the appropriate scale to form part of the overall complex. However, our work demonstrated that what had appeared in Richards' narrow trench to be the terminals of two segments of a small ditch, were actually two of a series of pits, which were in reality *later* than the main ditch (Fig. 5.3). So the mound was a single-phase construction. The pits were comparable with the later Neolithic recuts in the Cursus (Stone's 'embayments' discussed above), and it is quite possible that they were broadly contemporary, and had a similar purpose. However, it was notable that the pits were not cut into the



*Figure 5.3: Excavation of the ditch of Amesbury 42 long barrow, 2008, showing oval recuts on the inner side of the ditch (Photo: Adam Stanford, Aerial-Cam)*

ditch deposits, but into the natural chalk on the inner lip of the ditch. The effect of this would have been that clean, white chalk would have been extracted from them, and it is very likely that this was used to re-cap the long mound, rendering it a brilliant white feature in the landscape again. Turning this insight back onto the Cursus, it is evident that both Stone's 'embayment' and the recut pits that we discovered were dug into the edge rather than the centre of the ditch, so that they too would have provided a refurbishment for the Cursus bank. In both cases, the re-digging of the ditch may have been less significant than renewing the visual impact of the Cursus bank and the long barrow. This presumably took place at some point between the initial construction of Stonehenge and the arrival of the sarsen stones.

#### ***An earlier Neolithic monumental complex***

Although the recut pits in the long barrow ditch contained no finds, one of them had been re-dug, and a mass of knapping debris had been deposited there (Richards 1990, 99). It is interesting to speculate whether this was in any way connected with the much earlier knapping clusters in the Cursus ditch, and whether they form parts of some kind of localised tradition of practice. The long barrow

ditch itself provided only a few flint flakes, so we were relieved to find a battered portion of an antler pick from the ditch base. Two radiocarbon dates have now been taken from this antler. Contrary to expectations, Amesbury 42 does not seem to be appreciably earlier than the Cursus – it falls into the same mid-4th millennium bracket: perhaps, if anything, just a fraction later. The existing date for the small long barrow at Netheravon Bake, near to Robin Hood's Ball, is only a little earlier than this. A new and more accurate date has also recently been acquired for the Lesser Cursus, and this is indistinguishable from those for Amesbury 42 (see Table 5.1). Furthermore, new radiocarbon dates for food residues on pottery from the Robin Hood's Ball causewayed enclosure are only very slightly earlier than this (Whittle *et al.* 2011, 179). Robin Hood's Ball is located a little to the north of the two cursus monuments, on the southern flank of a low hill. Not only is the enclosure positioned to overlook Stonehenge Bottom and the area surrounding the Greater Cursus, its plan is flattened on the southern side, where entrances open into both of the ditch rings (Thomas 1964, 11). So while Robin Hood's Ball serves as a focus for a group of long barrows, it also references the two cursus monuments. What all the new dates seem to indicate is that the entire monumental complex

of enclosures, cursuses and some of the long barrows seems to have been constructed in a relatively short period of time, perhaps no more than a generation or two. In this respect it bears comparison with the later complex of Stonehenge and Durrington. However, we would like to suggest that the two contrast in one fundamentally important way.

In recent years there has been extensive discussion of the arguments concerning the respective significance of stone and timber architecture in the Stonehenge area during the later Neolithic, as proposed by Mike Parker Pearson and Ramilisonina (1998). These rely on an analogy with contemporary southern Madagascar, where the human life-cycle is understood as a process of progressive hardening and drying, ending up with the hard, dry bones of the ancestors. Consequently, the living dwell in houses which are made of timber, while stone is reserved for standing stones and tombs for the dead. Parker Pearson and Ramilisonina point out that Stonehenge has produced very little in the way of pottery or animal bones dating to its stone phases, yet a large number of cremation burials are present. By contrast, the larger henge monument at Durrington Walls had both timber architecture and colossal quantities of ceramics and bones. On this basis, they argue for complementary domains of the living and the dead, linked by the Stonehenge Avenue and the River Avon. One of the objections that has been raised against Parker Pearson and Ramilisonina's account is that it relies upon over-generalised and timeless conceptual structures, which appear to be immune to historical transformation (Barrett & Fewster 1998, 848). As a modest contribution to this debate, we would like to propose that the division between wood and stone is one that emerged in the Stonehenge landscape at a very particular point in time, and that it can be linked to contemporary social transformations.

### Changing places

If the Cursus-Robin Hood's Ball-Amesbury 42 complex came together in the mid-4th millennium BC, then it can be argued that the next burst of monument-building activity in the region took place at the very beginning of the 3rd millennium BC. The evidence is equivocal, but it may have been at around

this time that a series of native sarsen stones, which were already invested with cosmological significance, began to be quarried from their place of rest, embedded in the chalk, and erected as standing monoliths. The Cuckoo Stone, and Heel Stone at Stonehenge were raised and set up in their own quarry pits, while the Tor Stone, near Bulford, was erected adjacent to its original setting (Fig. 5.4). Certainly, at the Cuckoo Stone an early 3rd-millennium BC date was obtained from the tools possibly employed in digging its socket; an antler pick, rake and ox scapula (see Table 5.1). These had been deposited within a shallow pit adjacent to the now standing monolith (Fig. 5.5).

In 1979, Mike Pitts excavated a narrow pipe trench alongside the Heel Stone at Stonehenge (Pitts 1982). Close to the Heel Stone, a large empty stone-hole (97) was encountered and recognized to be cut into a substantial shallow hollow, a continuation of an enormous feature previously located by Atkinson, Piggott and Stone in 1956 (Atkinson 1979, 203–4; Cleal *et al.* 1995, 268–71). On the basis of observations at the Tor Stone and Cuckoo Stone, this hollow, over 5m in length, can now be safely re-interpreted as the original position of a native sarsen – that was subsequently quarried. Just like the Cuckoo Stone, this large sarsen was then erected in its own quarry pit. Although this stone was initially interpreted as forming a pair with the Heel Stone (Cleal *et al.* 1995, 268), we suggest it is more likely that this sarsen was actually the Heel Stone itself. This was an enormous sarsen that was subsequently moved 3m to the south-east, during later remodelling of Stonehenge.

Where a stone had initially been shifted slightly away from its origin, as when the Tor Stone at Bulford was erected 3 m away from its quarry hollow, a process of material commemoration often ensued. Directly after the Tor Stone was displaced, the empty hollow was filled with knapped flint flakes, unworked broken flint nodules and small sarsen flakes. Just as with the deposits in the ditch of the Greater Cursus, this lithic debris was not waste material derived from artefact production but seems to be produced purely to enable a place of significance to be physically marked. In practice this is a reciprocal process; from whence something had been removed something was now being returned. Again, that these practices were in everyday life associated with both



transformation and production is surely not without import in this context.

The erection of previously naturally embedded sarsens was but one component of a changing Neolithic world. From recent excavations, the revelation that the Aubrey Holes originally held bluestones indicates that large-scale stone architecture was being constructed both at Stonehenge and at other locations across Salisbury Plain from at least the start of the 3rd millennium BC. This process may have included the erection of the stone circle known as ‘Bluestonehenge’, recently discovered at West Amesbury during the summer of 2008, and a probable rhyolite ‘Bluestonehenge’ suspected to be located at the western end of the Stonehenge Cursus by J.F.S. Stone (1947).

Significantly, an equally early date came from one of the internal features within the henge monument on Coneybury Hill (Richards 1990, 134) (Table 5.1). The structure at Coneybury was very similar to those excavated immediately to the south of Woodhenge, including the timber construction originally identified beneath the round barrow Durrington 68 (Fig. 5.6). Essentially, these are composed of four large posts surrounded by a palisade of smaller posts, with an entrance defined by two large pits (Pollard 1995, 2009). It is arguable that these bear comparison with the buildings inside the penannular enclosures in the western part of Durrington Walls, in which four substantial posts surround the hearth area (Thomas 2007b, 152). In this respect, the Western Enclosures buildings are comparable with the Grooved Ware houses at Wyke Down on Cranborne Chase, but contrast with the houses in the settlements at the Eastern Entrance at Durrington (Green 2000, 74; Parker Pearson 2007, 129). If the Western Enclosures buildings were cult houses, spirit lodges or lineage shrines rather than dwellings, then it may be that the unroofed structures at Coneybury and south of Woodhenge were scaled-up representations of the same thing, massive sacred buildings, as they would have appeared when already ancient and ruinous.

In another contribution it is argued that the Grooved Ware complex in southern Britain drew on what were elsewhere aspects of everyday domestic life – houses, pits, pottery vessels, the consumption of food – and magnified and dramatised them, creating a

system in which the household or the domestic community served as a metaphor for the social as a whole (Thomas 2010, 9). It is conceivable that the adoption of these innovations took place at a time of social transformation, when larger social groups were being gathered together (at least temporarily), and engaging in projects like the construction of Stonehenge. It appears that at the end of the 4th and the start of the 3rd millennia BC, we can identify a horizon of activity in the Stonehenge landscape, in which standing stones, stone circles, and timber structures ultimately derived from domestic architecture, were all being set up. In the cases of Coneybury, Durrington, and West Amesbury, it was only much later that the stone and timber settings would come to be surrounded by henge ditches, as a kind of closing statement, which limited the influence of places with powerful histories on the surrounding landscape. The same is probably true of the Western Enclosures.

The salient point is that the standing stones and stone circles on the one hand, and timber structures on the other, were never constructed in the same locations. If we put this into the context of Parker Pearson and Ramilisonina’s arguments concerning the formation of a landscape divided into areas for the living and the dead, it would seem that the distinction between permanent and transient architectures was already in place by 3000 BC. But it is apparent that the preceding Cursus-Robin Hood’s Ball complex was quite different in character. Here, funerary monuments occurred alongside structures that referenced the hall, and by implication the community of the living. So it may be that the period around 3000 BC saw the replacement of one model of the social by another, which we might distinguish as the ‘hall’ and the ‘household’. The former would be a corporate social entity composed of both the living generation and its ancestral dead. Such a group might periodically fragment and reconvene at a fixed location, whether a timber hall or a mortuary monument of some kind, but the past generations would be understood as continually existing alongside the living, in the present. In the latter, the domestic community might be more permanently co-resident, yet they would live at a remove from their dead. This separation between the living and the dead enables their relationship to be reconfigured in terms of descent, so that ancestors in the





*Figure 5.4: The Tor Stone, Bulford Hill (Photo: Colin Richards)*



*Figure 5.5: The Cuckoo Stone under excavation, 2008, showing the quarry pit (Photo: Adam Stanford, Aerial-Cam)*





Figure 5.6: The timber structure beneath Durrington 68 round barrow (Photo: Adam Stanford, Aerial-Cam)

past provide a source of legitimacy for the passing on of authority and wealth from one generation to the next. The ancestors are now distant in time as well as spatially, and society is understood as descending from a past that is no longer directly accessible.

It follows from this that the shift from Early to Late Neolithic in the Stonehenge landscape involved a change from one mode of sociality to another, and that this required a renegotiation of the relationship between the living and the dead, expressed through the character of monumentality. In a sense, this was part of the process by which a society based around competition and inheritance would emerge in the Early Bronze Age. But the argument that we wish to make is that we can now identify the construction of Stonehenge as a critical moment in a process of social transformation. This brings us back to where we began this piece, with Richard Bradley's observation that Stonehenge represented a monument that was concerned with the past, set in a dynamic relationship with the lived world that surrounded it.

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# Henges, Rivers and Exchange in Neolithic Yorkshire

*Jan Harding*

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*Past accounts have suggested that the large henges of Yorkshire's central vales were situated on important routeways and were part of a system of Late Neolithic trans-Pennine exchange linking Cumbria and eastern Yorkshire. It is argued here that this would certainly account for the shared design of these enclosures, their association with rivers, the spacing and orientation of the monuments, and their relationship with the smaller henges of the Pennines. Yet there were also important religious reasons for building enclosures here, with those henges clustered together in the Ure-Swale Interfluvium demonstrating the spiritual significance of this landscape's rivers, its numerous springs and mires, and abundant deposits of gypsum. Hence, the henges were both geographically and spiritually liminal – places of holiness and renown which connected together communities living both sides of the Pennines.*

'it is certainly true that the largest henges are nearly always situated close to major waterways. This is not sufficient to demonstrate that the groups responsible for their construction and use were engaged in long-distance trade, or even that they exercised some form of control over materials travelling along the river network. But the possibility is intriguing and does deserve further research....' (Bradley & Edmonds 1993, 52–3)

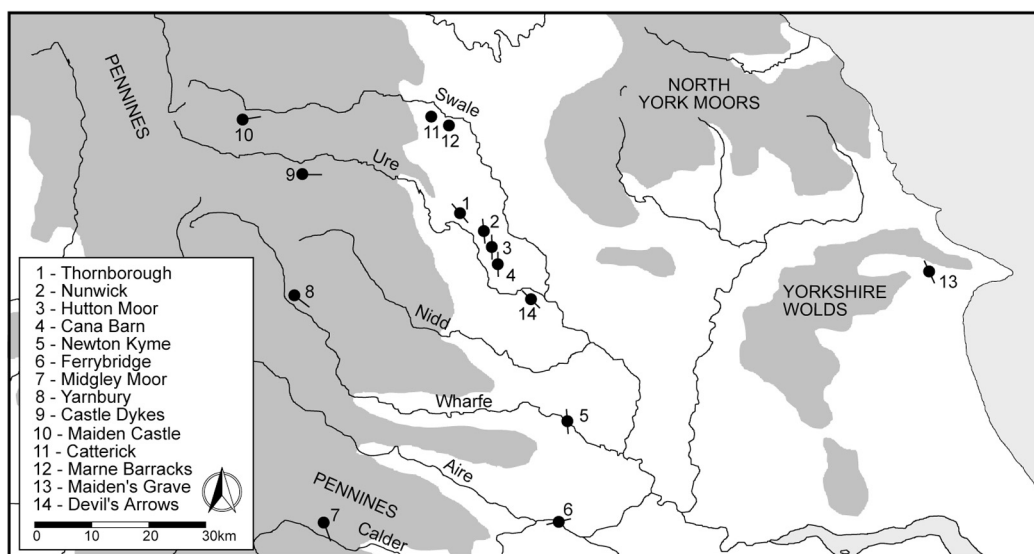
## Introduction

'Interpreting the Axe Trade', from which this quote is taken, fuses exchange, henges, and rivers into a searching account of Cumbrian polished stone axes. Its scope went beyond previous studies of Neolithic exchange, and links the circulation of these objects with the remarkable but largely ignored henges of Yorkshire's central vales, of which the best known are the three at Thornborough (Fig. 6.1). Noting their distribution in river valleys close to the higher ground of the Pennines,

the eight low-lying enclosures were regarded as commanding the major routes along which Cumbrian axes moved to eastern Yorkshire, where they are known in very large numbers (Bradley & Edmonds 1993, 162, fig. 9.8), and following an earlier suggestion by Terry Manby (1979, 76–7), as socially neutral locations where people met to freely exchange these objects and perhaps the eastern Yorkshire flint commonly found to the west of the Pennines (Bradley & Edmonds 1993, 198; see also Lynch 2005). For the first time the hitherto silent



Figure 6.1: Late Neolithic monuments in Yorkshire



monuments from along the rivers Ure, Wharfe, and Aire were populated by their builders and users. Not only that, these henges assumed a status reminiscent of their giant size – as important regional hubs in a network which connected communities from coast to coast.

This unity of purpose may be implicit in the henge's distinctive design. All but two are encircled by a pair of ditches and without exception they possess double-entrances and an almost identical size (Fig. 6.2). Only the appropriately named Big Rings in Oxfordshire is similarly surrounded by two earthworks, and if this was a regionally-specific architectural trait then at least one of their other characteristics could be more directly relevant to a role in exchange. Developing the suggestion that henges were located along routeways, Roy Loveday (1998) regarded their double-entrances as connected to the need to proceed through these sites, noting how 'their alignment along topographic corridors and their frequent enigmatic mirroring of Roman routes provides perhaps the most convincing case for an association with tracks, or at least some of the braided courses which we can hypothesise passed through their confines' (1998, 25). A third of these sites are in Yorkshire's central vales, and their potential significance was even more clearly stated by Blaise Vyner's (2007) proposal they lay along a 'Great North Route' running through the river strewn lowlands separating the hills of eastern Yorkshire, and the coast beyond, from the Pennine uplands and north-west England.

That their locations were 'close to the lowest readily fordable points on each of the rivers' (Vyner 2007, 75) – and also, therefore, to key Roman centres and the headports of the Middle Ages (Moorhouse 2003, fig. 53) – further highlights the possible associations between henges, rivers, and exchange.

### Many worlds are one

These studies challenge our thinking by hinting at dramatic socio-political interaction. It is worth emphasising the density of henges across these Yorkshire vales (Fig. 6.1). Most remarkable is the cluster of six enclosures – consisting of those at Thornborough, with others at Nunwick, Hutton Moor, and Cana Barn (Thomas 1955; Dymond 1963; Harding & Lee 1987, 304ff) – lying along a 12 km stretch of the River Ure within a three hour average walk of each other. Although there is little indication that all were built at around the same time, collectively they must be one of the largest earthmoving exercises known from Neolithic Britain. Here there are perhaps too many closely-spaced and massive henges for each to have served as a social or ideological 'central place', and as such, they raise important issues about the extent of interaction, co-ordination and communication, including through exchange, across this relatively small area. These issues are even more pertinent if we consider that nearby are the Devil's Arrows, whose giant pillars of stone are 'one of the most astonishing megalithic settings in

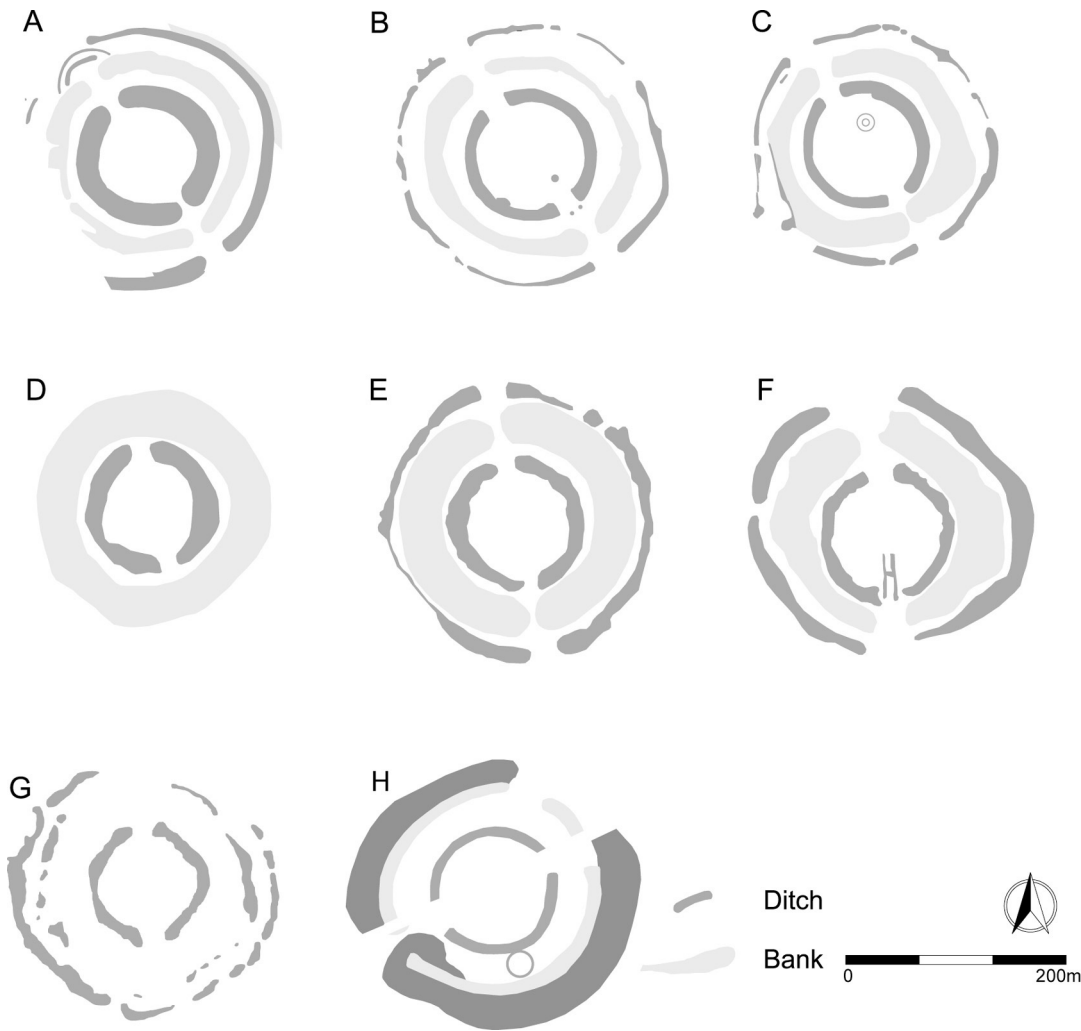


Figure 6.2: The henge monuments of lowland Yorkshire (a. northern Thornborough, b. central Thornborough, c. southern Thornborough, d. Nunwick, e. Hutton Moor, f. Cana Barn, g. Newton Kyme, h. Ferrybridge)

Western Europe' (Burl 1991, 1), and further to the south, the henges of Newton Kyme and Ferrybridge close to the rivers Wharfe and Aire respectively (Harding & Lee 1987, 310–11; Roberts 2005). It is difficult to contemplate this cluster of almost identical sites without also accepting their builders were in close contact and shared a tradition, or ritual imperative, which help create strong social bonds.

Their consistency of design is matched by other similarities. Further upstream from Newton Kyme and the cluster along the Ure are the two very much smaller sites of Yarnbury and Castle Dykes (Fig. 6.1). Neither are demonstrably Late Neolithic, despite excavations at Yarnbury (Dymond 1965), but there is little doubt these too are henges (see Harding & Lee 1987, 307, 317). A comparable site may have existed at Midgley Moor close to the river Calder (D. Shepherd, pers. comm.;

Howcroft 2011, 88, fig. 4), a tributary of the Aire. Its inner ditch and discontinuous outer bank enclose an area similar in size to Yarnbury, and its location on the elevated fell-top mirrors both Castle Dykes and Yarnbury (Harding 2003, 101), with all three on the opposite side of the river to the larger monuments downstream. These sites are in Wensleydale, Wharfedale, and Calderdale, or the three most obvious passages across the Pennines for the movement of Cumbrian axes and eastern Yorkshire flint (Bradley & Edmonds 1993, 198; Lynch 2005; Manby 1965; 1979), and it is perhaps no coincidence that Nidderdale, which fails to traverse these hills, appears unassociated with henges (Fig. 6.1). Movement eastward along their waterways takes you to the central vales, and whilst these eventually converge on the same point – the Humber Estuary, to the north and south of which are



found very large numbers of axes (Clough & Cummins 1988, map 6) – they facilitate access to different parts of the lowlands and different landscapes beyond, the rivers most likely being navigable (see Moorhouse 2003, 198). The Ure is best placed for interaction with the Vale of Pickering, the North York Moors, and the northern Wolds, the Wharfe with the western Wolds and Plain of Holderness, the Calder and Aire with communities to the south, including in northern Lincolnshire and along the river Trent.

These monuments occurring along well-trodden pathways could also account for the distances between them. Whilst there may be other undiscovered henges, their spacing reveals a conformity which may equate to an average day's walking. There is 22 km as the crow flies between Ferrybridge and Newton Kyme, perhaps no more than six hours walking if the former henge was close to a fording point or a navigable crossing of the river Aire. Predicting exact routes and daily rates of movement is problematic, but intriguingly the distance between Newton Kyme and the Devil's Arrows, immediately to the south of the river Ure, is similar, at 23 km, with a further 17 km between this stone row and the northernmost of the Thornborough henges, again assuming nearby fords or navigable points across the Wharfe and Ure. To journey along this part of Vyner's 'Great North Route', irrespective of if you were moving south to north or north to south, would not necessarily take more than three days with plenty of time to rest, feast and exchange, and could have been completed much more quickly. There is even conformity between the siting of the upland henges and the lower-lying monuments: Midgley, Yarnbury and Castle Dykes are 45 km, 51 km and 46 km from Ferrybridge, Newton Kyme, and the Devil's Arrows respectively. Each, in other words, is about twice as far as the distance between the larger enclosures – the equivalent of what could be two day's walk – approximately midway between them and the vales to the west of the Pennines.

Monument orientation could also be explained by routeways. It is far from clear why henge entrances are aligned the way they are, but in the dales and vales of Yorkshire it may reflect the direction of travel along these postulated routes (Fig. 6.1). The single entrances of the three smaller upland henges

are orientated east or south-east, looking towards the Yorkshire vales, and broadly reflect the course of the nearby river. The north-west to south-east or north-south alignment of the larger henges at Thornborough, Nunwick, Hutton Moor, and Cana Barn reproduces the direction of the river Ure (see also Richards 1996, 330), and the Devil's Arrows and Newton Kyme are orientated across the rivers, as would be expected if they were associated with crossing the Ure and Wharfe. The north-east to south-west alignment of Ferrybridge is different again, yet can also be understood in terms of routeways, for if it marked the end of Vyner's 'Great North Route' it was redirecting people either eastward along the Aire, and then perhaps to the Humber Estuary, or westward across the Pennines following the course of the Aire and the Calder. These patterns accord with the importance Roy Loveday attached to the actual act of passing through and beyond double-entrance henges, and it may well be that these sites were both physical and symbolic 'signposts'. The upland henges having only single entrances could indicate their location at the end of these major routeways, people then perhaps taking minor paths westwards to their 'homeworlds'.

It would be surprising if religion was not playing an important role in co-operation and planning. One measure of its significance may be the archaeo-astronomical alignment of the region's monuments. Much more work is needed, with only Thornborough benefiting from investigation (Harding *et al.* 2006), but at least here the sky appears to have been of value. The layout of this complex repeatedly referenced Orion's Belt, a constellation which itself crossed from east to west, rising in the direction of the Yorkshire Wolds, the final destination for many Cumbrian axes, and setting behind the central Pennines at the point where the Ure descends from Wensleydale. If deliberate, then east-west travel was being symbolically represented, bringing people's lives, their landscapes, and their sky into harmony with each other. The henge entrances themselves were not aligned on this constellation, but did frame the midwinter solstice sunrise, again indicating the celestial legitimization of these 'signposts'. Such experiential associations would have enlivened the routeways which issued through and out of the earthworks, and by linking these sites

with the ancestors, spirits, or gods of the sky, an idealised representation was created of the relationships which spanned the Pennines, their flanking lowlands, and the Cumbrian Mountains and Yorkshire coast beyond. Many worlds were being drawn together into a single symbolic universe.

We may, therefore, have an extensive network uniting communities across very different landscapes. Exchange could have been a concern which held these groups together or perhaps strengthened existing cultural allegiances. If we assume that ‘the movement of stone axes was caught up in larger political alignments’ (Bradley & Edmonds 1993, 194), it may be no coincidence that relatively few of these objects are known to the north between the rivers Swale and Tyne (Clough & Cummins 1988, map 6), suggesting that the network’s margin fell on or close to the east–west stretch of the former waterway. Monuments here are certainly distinctive (Fig. 6.1). Unlike to the south, there are no double-entranced enclosures, and although the ‘ringwork’ at Catterick could well be a henge (Moloney *et al.* 2003, 9–13), it was without a ditch, its architecture best paralleled by Mayburgh at Penrith (see Bradley 2007, fig. 3.22). Recent excavations have also revealed a large double palisade enclosure at nearby Marne Barracks (Hale *et al.* 2009), a monument form unknown to the south, and it has been suggested that the impressive, yet unexplored, enclosure of Maiden Castle, upriver at Reeth (Fig. 6.1), is Neolithic or Early Bronze Age (Vyner 2007, fig. 5, 79–80). Changing social circumstances are perhaps more apparent beyond the upper reaches of the Swale. Blaise Vyner may be right to see his ‘Great North Route’ extended further, to the rivers Tees, Wear, and Tyne, but an apparent absence of double-ditched henges, or of Late Neolithic enclosures altogether (but see Manby *et al.* 2003, 92–3; Vyner 2000, 103; 2007, figs 1 & 3, 77–8), highlight different socio-political ties across this area. It may even explain the lack of Neolithic and Early Bronze Age archaeology from the adjacent Stainmore Gap (Drury *et al.* 1998; Vyner 2007, 80), this obvious trans-Pennine route being too far north to be of use for the movement of Cumbrian axes and Yorkshire flint.

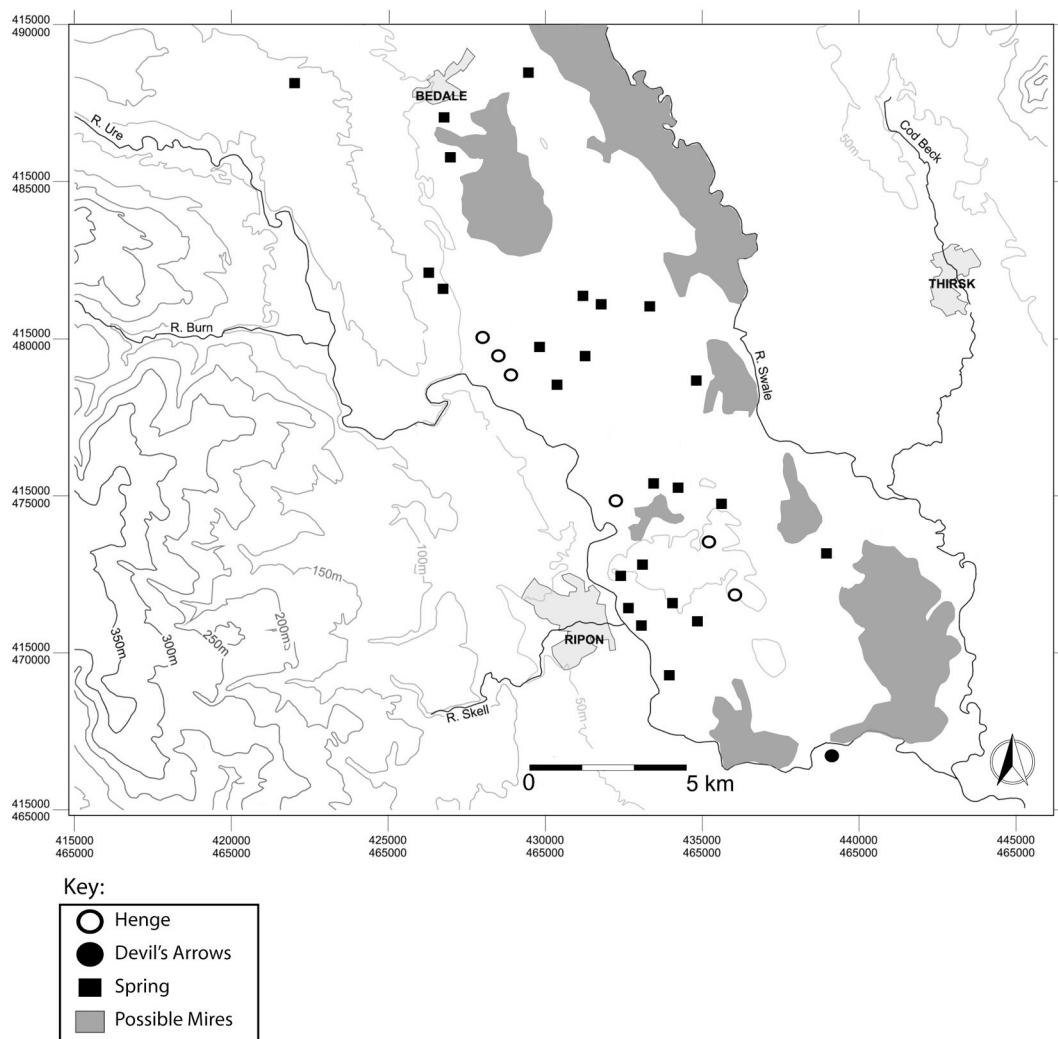
Many of the routeways may have stretched across sparsely populated landscapes. Early Neolithic long barrows are rare across the

dales, and with the exception of Giant’s Grave to the east of the river Swale, and possibly Ferrybridge (Roberts 2005, 197), absent from the vales (Manby *et al.* 2003; Deegan pers. comm.). Whilst this does not mean these low-lying landscapes were not permanently occupied in the 4th millennium – and at least two cursuses and a number of so-called ‘long mortuary enclosures’ are known – the far greater number of long barrows from eastern Yorkshire, and to a lesser extent the upper Eden valley and adjoining limestone upland, suggest both areas were more intensively occupied, divided by the wide expanse in which henges were subsequently built. That these later sites were purposefully located in a ‘liminal’ landscape would explain their absence from population centres elsewhere: none are known in the upper Eden valley of Cumbria, the nearest being Mayburgh and King Arthur’s Round Table to the north of the postulated regional network; and the only certain site from the Yorkshire Wolds is Maiden’s Grave – itself perhaps sited on an important routeway connecting the coast, the Wolds and the lowlands to the south – although a number of possible hengiforms are recorded as cropmarks (Manby *et al.* 2003, 73; Stoertz 1997, 30–2; see also Powlesland 2003, 285–6). Hence, it may indeed be that the large low-lying henges of central Yorkshire served as socially-neutral meeting-places for communities living much of their lives far to the east and west.

## Into the deep

Yet there must have been more to these henges than just routeways and exchange. The need for strategically-placed meeting places or monumental ‘signposts’ was surely exceeded by the building of *six* henges along the river Ure, suggesting more primordial forces were at work. But what motivations were implicit to the erection of so many giant earthworks within such a short distance of each other? Why do the three Thornborough sites, the Nunwick henge, and the Devil’s Arrows form a nearly straight alignment, and the Hutton Moor and Cana Barn henges another, which, if extended southwards, crosses the Ure close to the Devil’s Arrows (Fig. 6.3)? The building of such a distinctly arranged cluster can not be wholly explained by the monuments simply marking the course of routeways or reifying

Figure 6.3: The  
Ure–Swale Interfluve



the midwinter sunrise, especially since their double-entrances are, with the exception of the three Thornborough sites, orientated differently to these alignments. Both factors were clearly important, but are not the whole story. Instead, other concerns were also playing a part in determining what got built where, and given the significance of natural places (eg. Bradley 2000a), it is worth asking if it was the area's intrinsic physicality which attracted monument building on such a scale.

The fast-flowing and often steep-sided river Ure is one of the landscape's most obvious characteristics – part of the historic boundary between the North and West Ridings of Yorkshire – and its course would have been flanked by extensive wetland. Undoubtedly a source of sustenance and life, those following it must, nonetheless, have been aware of the river's temperamental power and inherent

danger. Having sacred enclosures close by could be an act of religious supplication and ritual appeasement, even if their builders were wisely cautious, placing them safely away on adjacent dryland (Vyner 2007, 74). An interest in water is demonstrated in other ways. Place names indicate that wetlands were once widespread and the traces of pools and mires are still to be seen across the landscape (Moorhouse 2004, 30–1). Indeed, to the north of the Thornborough complex marshland once extended for many kilometres, maybe even forming a boundary with the social-political networks of the river Swale and beyond. Springs are also numerous and possibly related to the henges (Fig. 6.3): 2.4 km to the north-west of the Thornborough complex is St Michael's Well, sited close to the alignment connecting its three henges with Nunwick and the Devil's Arrows; and exactly the same distance to the north-west of the

Hutton Moor henge, and again, close to its alignment with Cana Barn, is Hallikeld Springs. It is impossible to demonstrate if either was important during prehistory, but they have Christian names of great antiquity.

Water, one of nature's most powerful phenomena, was therefore intricately woven into the very fabric of this landscape. If this was closely associated with spirits and sacredness, and the springs with an underworld, then this could have been good reason for coming here in the first place, and just as today, water from special places may have offered salvation to the traveller. There is surely little doubt it possessed such connotations, for as Richard Bradley (1990, 57ff) has demonstrated, it was the context for many deliberate acts of deposition during the Neolithic, such as the large number of stone axes known from the river Thames. It is impossible to say if similar finds exist in the Ure, but interestingly, four specimens, including three from Cumbria, have been found from the edge of the boggy area immediately to the north of Thornborough. As objects of exchange they may have been appropriate 'gifts to the gods', and their deposition even accompanied by human bone (e.g. Bradley & Gordon 1988, 508; Harding & Healy 2007, 113–7, 227). Again, there is no comparable evidence from the Ure–Swale Interfluvium, where all forms of burial are extremely rare until the 2nd millennium BC (Harding in press, chapter 4), but if the dead did find a watery grave here, either as complete burials or as ancestral relics, it would be understandable given the religious connotations of rivers, springs, and bogs.

One of the area's other natural characteristics – its abundant deposits of gypsum – add to the landscape's distinctiveness. This soft white calcium sulphate is found in a 3 km wide band of Permian rock which runs through north-east England and into the Midlands (Powell *et al.* 1992, 94), and it was upon this very geology that the Thornborough and Nunwick henges were built. Gypsum was certainly known and valued at Thornborough: it was deliberately incorporated into a small pit with human bone at the centre of a triple-ditched round barrow in use in the first half of the 4th millennium (Harding in press, chapter 4); at a nearby cluster of undated pits it was made into a paste (*ibid.*), perhaps for use at the henges, whose banks are thought to have been coated in the deposit (Thomas 1955, 441–2; see also Cornwall 1953);

and it filled the bottom of the central grave at the Early Bronze Age Central Hill round barrow (Lukis 1870, 119). Its appearance in at least two funerary monuments as much as 2000 years apart is of interest given that other geological deposits alike in colour, like quartz, occur in similar contexts, and were perhaps symbolically connected to death (Bradley 2000b; Fowler & Cummings 2003, 6–8; Ruggles 1999, 98, 124, 155). Gypsum can certainly be likened to bone, its rapidly soluble property adding to a connection with life cycles. Underground its dissolution forms caves which then collapse inwards creating the area's many subsidence hollows (Cooper 1986; Powell *et al.* 1992, 15–8, 94–5). The sudden creation of what are often very large steep-sided shafts is startling even today, yet during prehistory must have been deeply unsettling and perhaps a cause of ritual appeasement. Again, there was good reason for building henges here, and this association with solution hollows could be paralleled by the Priddy Circles in Somerset (Bradley 2000a, 88, fig. 25).

The Ure–Swale may have therefore been a place of renown where different worldly elements came together to mould a 'sacred landscape'. It was a place favoured by the spirits or gods of water and the underworld – and maybe a place intimately linked with the celestial skyscape. To travel here was not simply about visiting venues at which exchange could freely occur, but to undertake a journey to a landscape whose very holiness sanctified activities like the socially unfettered circulation of stone axes and Yorkshire flint. This is reminiscent of pilgrimage, perhaps explaining similarities in henge design, for as Roy Loveday (1998, 26) has remarked, shrines on historic pilgrimage routes can closely resemble each other. The Devil's Arrows, distinctive as they are on account of their architecture and siting to the south of the Ure, was perhaps a 'gateway', or if they were later than the henges, a commemoration of the earlier routeway. The similarities in layout with both Newton Kyme and Ferrybridge could suggest this pilgrimage route extended southwards, incorporating other rivers into its course, their very crossing perhaps part of the religious experience (Loveday 1998, 26). It is impossible to say if there was a key shrine along this route, although the largest complex, at Thornborough, must be a strong contender. Neither can it be said



in which direction pilgrims came, or indeed, if movement was only one-way. But the henges as places of worship along a pilgrimage route – possibly built to sanctify existing places of religious significance like the nearby springs – would certainly explain their distinctive characteristics.

## Conclusion

This short account makes many assumptions – especially in regard to the monument's chronology, the socio-political significance of exchange, and the likelihood that stone axes and flint were circulated in the same way as part of a single unchanging system – whilst ignoring the local instability, or ebb-and-flow, which played such an important part in interaction and monument building. Though these limitations are unavoidable, given the patchy nature of the archaeological evidence, such generality can play a useful role in interpretation, for it forces us to embrace archaeology's regional context. Only then can we sometimes ask the right questions of the evidence. Richard Bradley has repeatedly reminded us of this. His work possesses a scale and interpretive ambition unmatched by other contemporary British prehistorians. He repeatedly demonstrates how society stretched across *both time and space* with groups and communities connected in many different and complex ways. The people who populate his prehistoric places are not just anatomised and fractured beings, but part of wider and often populous social networks. As has hopefully been demonstrated through the remarkable Late Neolithic monuments of Yorkshire, to forget this is to devalue some of their greatest achievements: for the builders and users of these sites may have travelled long distances, enjoyed relations over large parts of northern England, and sometimes worshipped at the same places irrespective of whether they hailed from the east or the west of the Pennines.

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# The Social Lives of the Small Neolithic Monuments of the Upper Thames Valley

*Gill Hey*

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*In 1983–4 Richard Bradley excavated the oval barrow at Radley, just outside the Abingdon causewayed enclosure. In many ways this multi-phase monument encapsulates the enigmatic character and complexities of the small earlier Neolithic monuments of the Thames Valley. This article examines these very diverse monuments in the light of current research: their origins, purposes and the ways in which they played an important role in the social life of the valley.*

The Upper Thames Valley has had a long history of investigation into its prehistoric remains, from the early 17th and 18th century surveys of Plot and Stukeley and the 19th century work of people like Dawkins and Rolleston, to the excavations undertaken in advance of development mainly from the 1970s onwards (Hey *et al.* 2011, 154–60). It has also had its share of notable archaeologists excavating prehistoric remains. E.T. Leeds (1934), for example, was active at sites such as the Abingdon causewayed enclosure, Radley Barrow Hills, the Drayton cursus and the Beaker flat grave cemetery at Cassington in the 1920s and 1930s. Much of this work was prompted by imminent development, largely gravel extraction.

Richard Bradley entered this arena in the late 1960s when, as a member and then President of the Oxford University Archaeological Society, he excavated on sites in the Eynsham and Cassington area, and his involvement

and interest in the archaeology of the valley continued when he took up a post as lecturer at the University of Reading in 1971.

## **Richard Bradley and the Radley oval barrow**

Richard became involved in the large-scale excavations at Radley Barrow Hills, undertaken in advance of housing in 1983–5, soon after completing his influential *The Social Foundations of Prehistoric Britain* (1984). Topsoil stripping revealed a complex multi-period site with major phases of archaeological remains from the Neolithic to the Anglo-Saxon period. The (perhaps unusual) decision was taken to divide responsibility for the site by period, and Richard had the task of excavating the ‘Neolithic’ features – an oval barrow, a segmented ring-ditch and a putative ‘henge’ comprising concentric circles of pits or post-holes – which he did with students from Reading University in 1983–

4 (Barclay & Halpin 1999, 5). The ring-ditch proved to be of probable Early Bronze Age date, and the ‘henge’ a Victorian tree plantation (*ibid.*, 44–6, 168–9). Unsurprisingly perhaps, numerous Neolithic features were found and excavated by the Oxford Archaeological Unit during work on the Bronze Age barrow cemetery and later remains (Barclay & Halpin 1999).

Careful excavation revealed that the double-ditched oval barrow with substantial central feature visible from the air was a complex Neolithic monument with at least five separate phases of construction overlain by a Saxon sunken-featured building (Bradley 1992a: Fig. 7.1). Great attention was paid to the details of construction, use, and backfilling of the different phases of the monument, revealing the positions of causeways, banks and recuts, posts, and bedding trenches for possible wooden structures within ditch fills and the deliberate placing of specially-selected material. Understanding the relationship between the barrow and the nearby Abingdon causewayed enclosure was a major research aim of the excavation (*ibid.*, 127–8). The positioning of different artefacts and animal and human bone was observed to reflect deposition within the enclosure itself, and the extent to which this would have purposefully referenced the larger monument was discussed.

In many ways this monument encapsulates many of the features of the numerous small Neolithic monuments found in the Upper Thames Valley, including a rectangular enclosure, U-shaped enclosures, split-post, and other post settings, a grave containing two individuals buried with a polished knife and a shale or jet belt slider and, finally, an oval barrow (Fig. 7.2). Indeed, monuments in this region are present in a bewildering variety of shapes and sizes which, if the valley and its catchment are taken into account, range from stone monuments more commonly found in the west of the country, to those classic gravel earthworks like rectangular ‘mortuary’ enclosures and cursuses; from small monuments comprising little more than split posts to transepted Cotswold-Severn long cairns; from simple single-phase monuments to those with elaborate sequences of development; and from small burial sites of individuals to large communal gathering places. They span practically the entire period of the



Neolithic, but most especially belong to the 4th millennium cal BC.

What sense can we make of this variability and the combinations in which different forms are found, and what light can these monuments shed on the people who constructed them and the events for which they were built?

*Figure 7.1: The Radley oval barrow from the air and looking south-west. Kite photograph by Brian Durham. (© Prehistoric Society)*

## Early monument building in the Upper Thames Valley

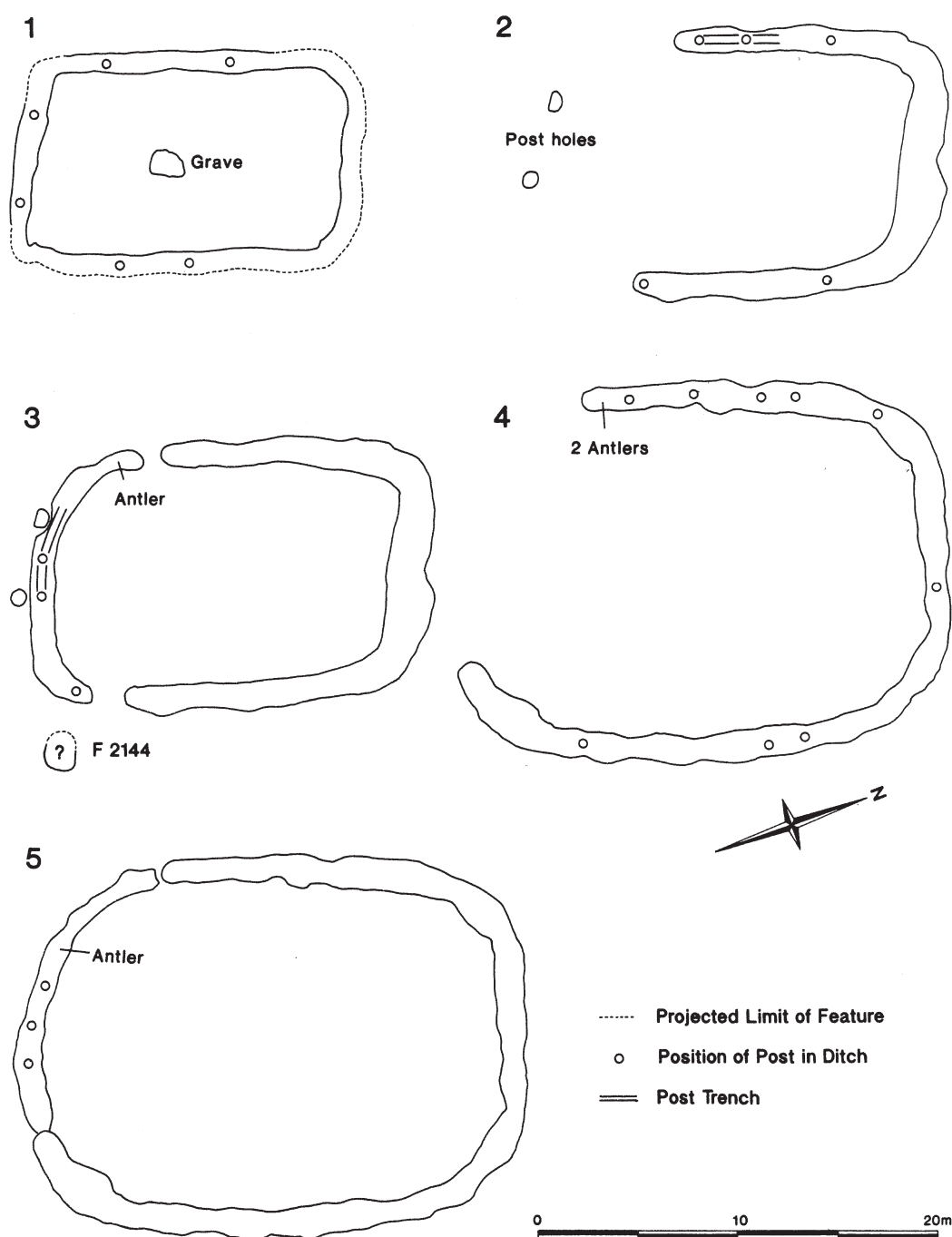
### *Origins*

There were no monuments in the Thames Valley at the beginning of the Neolithic: Late Mesolithic populations did not construct them nor, so far as we know, did they bury their dead in a formal manner (Hey *et al.* 2011, 193–220). The only dated Mesolithic human bone is a left humerus from the Early Mesolithic site at Thatcham in the Kennet Valley (Wymer 1962) and a bone from one individual found in the Early Neolithic tomb at Burn Ground (Smith & Brickley 2006).

Our current evidence suggests that monuments were first constructed from the 38th century cal BC, but these are found, not in the valley itself, but at its Cotswold fringes,



Figure 7.2: The structural sequence of the Radley oval barrow (after Bradley 1992, fig. 4: © Prehistoric Society)



along the upper tributaries and adjacent uplands (Smith & Brickley 2006; Bayliss & Whittle 2007; Dixon *et al.* 2011, 466–72). The chambered long cairns of the Cotswold-Severn group are substantial and dramatic monuments of earth and stone which seem to have been used for the successive burial of the dead (Darvill 2004). Dolmens, small circular stone-built structures and round and oval barrows are also present amongst this group

(*ibid.*; Darvill 2010), although it is far from clear that these are as early as the dated long cairns. There is also evidence of earlier Neolithic activity in the form of midden accumulation and house construction, some of which is found sealed beneath these tombs. Hazleton North and Ascott-under-Wychwood are good examples of this sequence of events (Saville 1990; Benson & Whittle 2007). In these cases, the earliest activity may belong to the 39th or

late 40th century cal BC (Bayliss & Whittle 2007; Dixon *et al.* 2011, fig. 9.29).

During these early centuries of the 4th millennium, at the beginning of the Neolithic period, there is no evidence for monument construction in the valley itself; the Cotswold-Severn monuments may pre-date comparable constructions on the gravels by up to 100 years. That is not to say that no one lived in this landscape over this period of time, however. The Neolithic longhouse at Yarnton dates to the end of the first quarter of the 4th millennium cal BC (probably the 38th century), broadly contemporary with the Ascott-under-Wychwood long cairn, and a dispersed midden and a pit with cereals lay nearby (Healy *et al.* 2011a, 421–2; Bayliss & Hey forthcoming). At Abingdon/Radley Barrow Hills the landscape had been cleared of trees early in the 4th millennium (Parker 1999) and antler deposited within a deep pit sealed beneath a mortuary structure dated to 4250–3700 cal BC (95% confidence; OxA-1881: 5140±100 BP; Barclay & Halpin 1999, 28). Further down the valley, in the Middle Thames, the formation of the Area 6 midden at Eton had a main period of use from the 38th to the 36th centuries cal BC and Carinated Bowl pottery was found low down in one of the middens (Allen *et al.* 2004; Healy *et al.* 2011a, 401, fig. 8.8), and there was deliberate interference in the tree canopy early in the 4th millennium at Runnymede (Needham 2000, 193–5; Robinson 2000, 31–2). Nevertheless, monuments as formal structures built to be visible and to endure seem not to have been a necessary part of social life in the Upper Thames Valley at the start of the Neolithic. They may not have been desired, appropriate or possible.

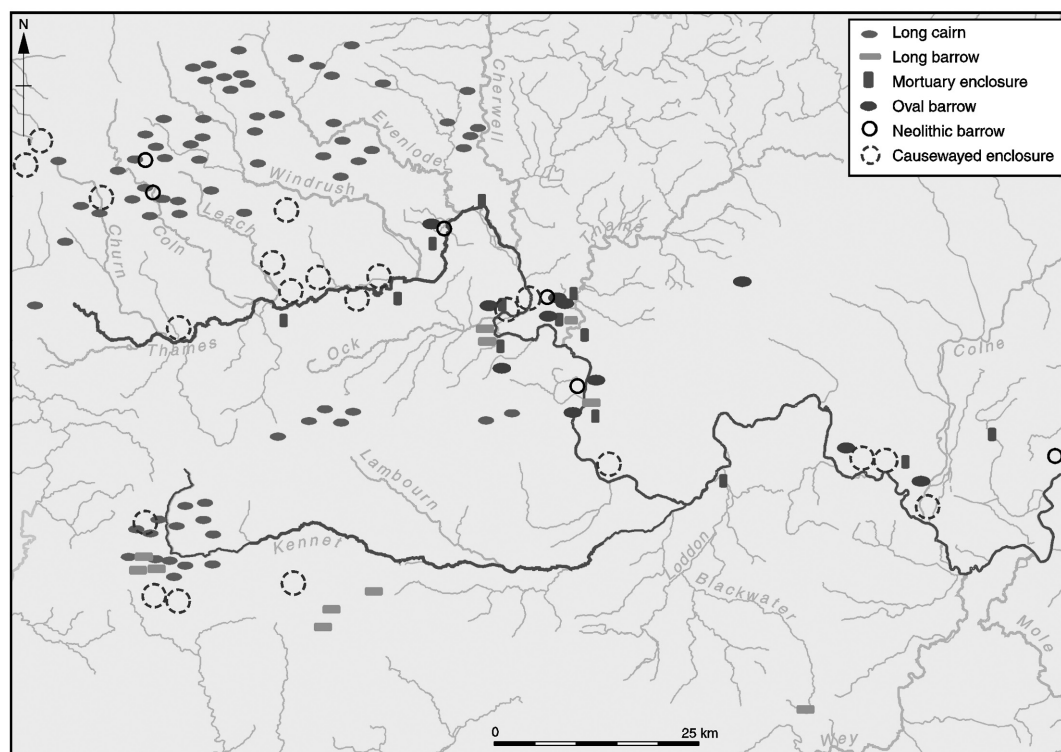
It has been suggested that the settlement evidence in the valley is consistent with small groups of incomers bringing a Neolithic way of life with them, for example at Yarnton, and hunter-gatherers adopting and coming to terms with a Neolithic way of life in other parts of the valley, for example in the area around Eton (Hey & Barclay 2007; Hey *et al.* 2011). These contrasts, both in terms of settlement patterns and monument construction, raise some interesting questions about the character of Early Neolithic settlement in the area. It may be that the process of Early Neolithic settlement of the Cotswolds was entirely different to that in the valley, being both earlier

and having earlier monuments. A Neolithic lifestyle arrived or was adopted independently in the Thames Valley and there was little initial contact between these groups. Alternatively, the ‘Neolithic’ people in the Thames Valley (perhaps in contrast to those who had been hunter-gatherers) moved around and formed part of the communities who buried at least some of their dead in Cotswold-Severn tombs. These higher areas may have been seen as ancestral resting grounds, suitable places to bury the important dead (Healy *et al.* 2011a, 432). However, when people in the valley did decide to construct monuments they did not build Cotswold-Severn tombs. To some extent this would have been a reflection of the geologies on which they were built – monuments on the gravels are inevitably going to look different from those where stone is readily available – but the differences are more marked than this and were maintained throughout the Neolithic (Fig. 7.3). There are ‘long barrows’ with flanking ditches in the valley, for example one just 3 km from the Abingdon complex (Pugh 1998), but these are few and small (Hey *et al.* 2011, 276–7, fig. 12.16), and the majority of monuments are quite distinct. There may have been a separate sense of identity: east *versus* west (I am grateful to Josh Pollard for this suggestion).

A third possibility is that, although there was contact between these adjacent groups, the population was small and each group developed independently, with its own trajectory of change; there was no stimulus or desire to emulate neighbours.

The evidence is currently too limited to favour one interpretation over another, but an absence of contact seems unlikely. The population may have been small, but it was well distributed and it is hard to think of individual groups as completely isolated. Their shared material culture is marked: they made and used similar pottery and worked flint in a similar manner (most of the latter having come from the same chalk sources), grew the same crops and raised the same animals. In addition, these areas were linked through the river valley network and, by the time of the construction of causewayed enclosures towards the middle of the 4th millennium BC, many of these enclosures were positioned along the north bank of the Thames where the Cotswold tributaries flowed into the river (Fig. 7.3), suggesting the importance of contact between

Figure 7.3: Distribution of earlier Neolithic monuments and causewayed enclosures in the Thames Valley (© Oxford Archaeology)



these areas. Perhaps in this new and uncertain Thames Valley environment (incomers in an alien landscape, and their hunter-gatherer neighbours establishing new ways of living in a familiar world) people were negotiating the right way to live in an Early Neolithic society (Hey & Barclay 2007; Whittle *et al.* 2011, 898–905).

#### *The earliest monuments in the valley*

Rectangular enclosures are usually thought to be the earliest Neolithic monuments in the Thames Valley (Hey & Barclay 2011) and comparisons have been drawn between rectangular enclosures and Early Neolithic houses, with houses forming an inspiration for the monuments (Loveday 2006, 126–30; Bradley 2007, 62). That having been said, the few that have been investigated have produced few finds of any kind and dating evidence is very limited. The Dorchester site 1 enclosure cut a pit containing the disarticulated remains of a young adult with a radiocarbon date of 3950–3300 cal BC (at 94% probability; OxA-119: 4800±130 BP; Whittle *et al.* 1992, table 12), and was incorporated into the later cursus monument which cut through another rectangular enclosure (Site VIII) further north-west. An enclosure at Yarnton (Site

5) was recut after it had largely silted up, at a period when Peterborough Ware was current; conjoining sherds were found in the recut and in an adjacent pit dated to the final third of the 4th millennium cal BC, and redeposited Neolithic Bowl was found in its upper fills (Hey forthcoming). Recent excavations by MOLA of a sub-rectangular enclosure at the Radcliffe Infirmary site, Oxford, recovered bone and charcoal from the lower fills which indicate a construction date in the middle of the 4th millennium cal BC (Braybrooke 2010, 16; Oxford Archaeological Research Framework 2011). On the other hand, the small rectangular enclosure that formed the first phase of the Radley oval barrow, although not dated itself, was orientated on the causewayed enclosure and probably post-dates its construction.

Other small monuments of different form might be just as early, however. A sub-circular barrow at Staines Road Farm, Shepperton may be as early as the 37th century cal BC (Jones 2008; Healy *et al.* 2011a, 396), and the oval barrow at Whiteleaf on the Chilterns, overlooking the river Thame and the Vale of Aylesbury, was constructed probably in the 36th century cal BC, over a man who was buried between split posts probably 40–150 years earlier, in 3715–3635 cal BC (93%

probability; Bayliss & Healy 2007; Healy *et al.* 2011b, 269–70). A man buried beneath an oval barrow at Mount Farm, Dorchester, is dated to 3640–3370 cal BC (OxA-15748: 4738±35 BP; Lambrick 2010, table 1). In these examples, the split post arrangement has a claim to be the earliest small monument.

The dates for Horton in the Lower Colne Valley and North Stoke in the Upper Thames, suggest that at least some U-shaped ditched enclosures were of Early Neolithic date too (the latter pre-dated a bank barrow with a radiocarbon date of 3650–3350 cal BC; (BM-1405: 4672±49 BP; Case 1982), perhaps broadly contemporary with causewayed enclosures, although the u-shaped enclosures sequence at Radley with associated radiocarbon dates indicates a later currency, after 3350 cal BC (Bradley 1992a, 134–5; Garwood 1999, 277–8). In addition, a number of monuments have been found with Abingdon Ware pottery, for example the double ring ditch at Newnham Murren (Moorey 1982) and the segmented enclosure at New Wintles Farm (Kenward 1982). The main problem is that the vast majority of these monuments have no dates.

Were causewayed enclosures and early small monuments part of the same social world, with the latter operating on a more individual and local basis (Bayliss *et al.* 2011, 724)? In the Upper and Middle Thames Valley, causewayed enclosures date to the middle of the 4th millennium cal BC (the Abingdon enclosure could be as early as 3650 cal BC, but may belong to the mid-36th century cal BC; Healy *et al.* 2011a, 407–21). We can tentatively suggest, therefore, that at least some small monuments were earlier, but that the florescence of both types overlaps, as suggested by Whittle *et al.* (2011, 897).

### ***Why here; why now?***

Unlike causewayed enclosures, small monuments are widespread up and down the valley from Lechlade near the source of the Thames to Imperial College Sports Ground in the Lower Colne Valley, and they are not necessarily found near other monument clusters. Also, causewayed enclosures were constructed on an entirely different scale. Requiring considerable investments of time and effort, they provided large arenas up to 200 m across in the Thames Valley which could accommodate many people, and provide

evidence of large-scale gatherings, conspicuous consumption, and rituals involving the deposition of specially selected items, including human remains (Whittle *et al.* 1999; Oswald *et al.* 2001; Bradley 2007, 69–77). By contrast, small monuments in the Thames Valley were tiny (Garwood 2011a, 338, fig. 14.8). The largest, Dorchester Site 1 rectangular enclosure, was 135x53 m, but dimensions of *c.* 15 m across are more usual and some were even smaller. Their distribution, rare deposits and small size all imply that these were monuments associated with small groups of people.

Before the creation of causewayed enclosures, sites of assembly were much smaller in scale, possibly local and represented by middens, such as those examined at Eton and Ascott-under-Wychwood (Allen *et al.* 2004; Benson & Whittle 2007; Pollard 2005, 109–11; Bradley 2007; Lamdin-Whymark 2008). Suddenly, large defined spaces became important, places with multiple entrances – permeable monuments. There may have been a link with herding, animal deposits in causewayed enclosures echoing their increasing importance in the subsistence economy (Bradley 1993, 86). These were places to negotiate new relationships, possibly referencing ancestral meeting places on the continent, and they may have fostered a sense of wider group identity (Barrett 1994; Bradley 1998, 71–2). They may also have created a desire for expression amongst closer-knit groups.

It is interesting to note the evidence for a change in farming strategies in the mid-late 4th millennium cal BC. The date of this change is hard to pinpoint precisely because the information comes from few sites and the calibration curve is awkward. The Early Neolithic evidence (for example at Yarnton, Ascott-under-Wychwood and the Eton Rowing Course middens) suggests a mix of strategies with reasonable quantities of cereals being grown and consumed in addition to wild fruits and nuts, and domesticated animals being raised to provide dairy products in addition to meat and secondary products. By the time that Peterborough Ware was in widespread use in the third and fourth quarters of the 4th millennium BC, cereals had become scarce in pit deposits, wild fruits and nuts were more common and there seems to have been a greater emphasis on herding (Moffett *et al.* 1989; Hey & Barclay 2007; Hey *et al.* 2011, 258–60).



With great caution, it could be proposed that, as people became more mobile, and more numerous, groups would have become more self-consciousness and aware of their own identity. It may have become important for groups to distinguish between themselves, inscribing their own particular view of the world on the landscape (Bradley 1993), but there may also have been an environment within small communities which allowed some members to become particularly significant and worthy of commemoration at death. In the wider social context of large gatherings and 'tethered mobility' (Whittle 2003), small family-based monuments may have anchored families to particular places – places to call home.

Once they had started to alter the earth, all kinds of structures became possible.

### *Architecture and design*

For Neolithic people moving around the generally well-wooded Thames Valley landscape, each monument appearing in a clearing would have looked quite distinctive. From rectangular, to oval and round, and from c. 100 m to only 5 m or 6 m across, they were different one from another. There is no evident clustering of particular monument types in different parts of the valley.

Some monuments had continuous ditches, presenting a closed aspect to observers, for example the first phase rectangular enclosure at Radley (Bradley 1992a, 128–9), Ring-ditch 2 at Corporation Farm, Abingdon (Shand *et al.* 2003, 32–5), or the oval barrow at Mount Farm, Dorchester-on-Thames (Lambrick 2010, 21). Much more commonly, these monuments had causeways enabling access to the interior. Rectangular ditched enclosures, for example, usually had one or more 'entrances', often centrally placed in the middle of one side, and seem to have had internal banks (for example, Dorchester Site VIII or Yarnton Site 5; Whittle *et al.* 1992, 148–52; Hey (ed.) forthcoming). Thus access to the interior was possible, if not necessarily easy; the bank would have provided more visible definition of the space within rather than screening it from external view, and would have focused the attention of those inside on activities taking place there.

A number of circular to oval monuments were also furnished with single entrances and internal banks, thus offering points of

comparison with rectangular enclosures but providing smaller and more intimate settings in addition to the very different experience of being within a round space rather than one with corners (Kinnes 1992; Field 2010; Bradley *in press*). More commonly, these small circular to oval monuments had segmented ditches. Sometimes the spaces between the ditches would have enabled easy access to the interior (for example Green Park in the Lower Kennet Valley; Brossler *et al.* 2004), much as would have been present on causewayed enclosures but on a very much smaller scale; only very few people could have fitted into Ring-ditch 1 at Corporation Farm or New Wintles Farm, for example, if indeed this is what was intended. Perhaps they created the impression of permeability rather than facilitated entry. In other cases, the segments were close together or conjoined soon after construction, for example at Staines Road Farm, Shepperton where only a narrow causeway was left (Jones 2008), or a number of the small monuments at Dorchester-on-Thames (Atkinson *et al.* 1951; Whittle *et al.* 1992). In these cases, what seems to have been important was the use of segments as a means of creating a monument.

It is seldom clear on these gravel sites how the soil excavated from the ditches was used, but evidence has been found of internal and external banks, and also internal mounds. U-shaped enclosures may have had internal and external banks, for example that at North Stoke (Case 1982), but importantly provided open space at one end. The split posts and later ditch with posts and a bedding trench at Radley oval barrow phases 2–3, along with the deposition of material, show that a range of ritual activities might have taken place in these areas (Fig. 7.2: Bradley 1992a). As the name implies, oval barrows more certainly had mounds; that at Radley was detected through the distribution of gravel in the overlying ploughsoil and the relative shallowness of the overlying Saxon sunken-featured building (*ibid.*, 132–4), that at Whiteleaf still stands (Childe & Smith 1954).

This variety in outward appearance represents many individual choices taken by their builders with great care. After all, these were the physical structures within which significant events would have taken place, their form guiding or restricting movement, helping or hindering participation and forming a backdrop to activities (Bradley 1993; Barrett 1994). Indeed,

they reflect the way in which people perceived their world and chose to portray their beliefs in architectural form (Bradley 1993, 71). They demonstrate great creativity, a concern for aesthetic qualities and doubtless too, an element of competition. These monuments did not require large amounts of physical effort. They were places constructed by small groups, perhaps individual families, for ritual and commemorative activities that were of concern to themselves alone. They were designed to be different and, perhaps, a source of pride.

There are other ways in which small monuments were embellished above ground and, in the Thames Valley, the evidence is principally for the use of posts. Posts in the various ditches of the Radley oval barrow have already been mentioned and were present in all phases of the monument (Bradley 1992a: Fig. 7.2). Posts were set in the ditch around the entrance to the rectangular enclosure at Yarnton (Hey (ed.) forthcoming) and in the U-shaped enclosure at Horton (Ford & Pine 2003). These might have looked most unusual and striking, and they seem to have become more common through time. A number of the small circular Neolithic monuments at Dorchester had post-circles as part of their construction sequence and free-standing post-circles are also found at Dorchester-on-Thames (Site 3), Mount Farm, and elsewhere (Hey *et al.* 2011, 305–7), although they tend to belong to the 3rd millennium cal BC.

A small but important group of monuments focused on split tree trunks between which, it is assumed and sometimes can be demonstrated, some kind of structure existed. These are found in places as diverse as New Wintles Farm on the Thames gravels near Eynsham and Whiteleaf on the Chilterns chalk. A similar, though larger, example was found beneath the Wayland's Smithy I oval barrow on the nearby Berkshire Downs. The symbolic importance of the tree is apparent, as is its association in all these cases with the burial of the dead, whether as whole bodies or partial remains (Childe & Smith 1954; Kenward 1982; Whittle 1991; Hey *et al.* 2007), a pattern seen elsewhere in southern Britain, for example at Fussell's Lodge in Wiltshire and Aldwinckle in Northants (Ashbee 1966; Jackson 1976).

Other monuments were made more elaborate because of construction features, for

example the double ditched circular enclosures at Linch Hill Corner, Newnham Murren and Imperial College Sports Ground (Grimes 1960; Moorey 1982; Barclay *et al.* 2009), perhaps an architectural expression of exotic burial.

## Histories

However these monuments were first constructed, few remained unmodified and the changes that some underwent demonstrate that the relationship between the original form and the later appearance of the monument was far from straightforward. Changes were sometimes as simple as the joining up of discontinuous ditches, but were often more fundamental. Monuments that were originally similar could end up as very different monuments, just as similar monuments could cover very different remains. There are a number of examples of rectilinear monuments which incorporated circular elements, or where rectangular monuments became oval mounds. The Radley oval barrow is, once again, a very good example as it was transformed from a rectangular enclosure, to a U-shaped enclosure which became closed and then incorporated into an oval barrow (Fig. 7.2; Bradley 1992a). Was it at this stage that it became inaccessible? Indeed oval barrows can be seen to be the final acts at a number of sites, overlying split-post settings as we have seen, as well as U-shaped enclosures like Horton and Dorney Reach (Ford & Pine 2003; Lamdin-Whymark 2008). At the beginnings of their very different lives, it is very unlikely that these ends would have been anticipated.

## Monuments for the dead?

It tends to be assumed that monuments were associated with the burial of the dead and, indeed, there are a number of clear examples of monuments that seem to have been built around and/or over inhumation burials. These can belong to the earliest phase of monument construction in the valley, as the examples at Whiteleaf and Mount Farm, Dorchester, show (Hey *et al.* 2007; Lambrick 2010; Garwood 2011b, 390–3). These are seldom found with grave goods. An important group of complex and furnished burials have also been found which date from the later 4th millennium BC (Garwood 2011b, 395–8). One of these

graves lay at the centre of the Radley oval barrow, in which lay a woman accompanied by a polished flint knife and a man with a jet belt slider (Bradley 1992a). A finely-polished knife and a jet belt slider were also found with a woman at Linch Hill Corner, Stanton Harcourt (Grimes 1960). The burials at Radley, Mount Farm, and Whiteleaf were covered by oval barrows whereas the Linch Hill woman lay beneath a round barrow defined by a double ring ditch, another indication of how similar deposits could be succeeded by different constructions.

These examples are rare, however, and if human remains are found at all, they tend to be disarticulated and much more partial. The recovery of the skull fragments of children at the segmented oval enclosure at New Wintles Farm is an example (Kenward 1982); similar deposits were found in the ditch of the oval barrow at Horton (Ford & Pine 2003) and skull fragments were also found in the secondary fills of the later ditches at Radley oval barrow (Bradley 1992a, 134–5). Cremated remains have also been found associated with some of these monuments, the most striking being those found in the final stages of use of the small circular and oval monuments constructed at Dorchester-on-Thames (Atkinson *et al.* 1951; Whittle *et al.* 1992) and Imperial College Sports Ground in the Middle Thames (Barclay *et al.* 2009), the latter dated to the end of the 4th and very early 3rd millennium cal BC.

There are many cases where the excavation of these monuments revealed no evidence of mortuary associations at all. It may be that deposits have been destroyed subsequently, or that human remains were placed within these monuments temporarily before being removed and deposited elsewhere. Rectangular enclosures have been suggested to have been used for exposing the dead (Atkinson 1951; Whittle *et al.* 1992, 152), and in the case of Dorchester-on-Thames Site VIII, a human jawbone was recovered from the ground surface within the enclosure and Dorchester Site 1 cut a pit containing the remains of a young adult. Yarnton Site 5 enclosure, which entirely lacked human remains, is much more typical of these monuments and some people have questioned their mortuary role (Loveday 2006, 86–7). An inhumation burial was later placed within the entrance to the Yarnton enclosure, however, and pits containing some

cremated human bone were found around its edge; a Beaker burial lay to the north and another inhumation burial in the top of the ditch. The original role of the enclosure may be far from clear, but from the later 4th millennium BC to the Early Bronze Age, this monument was seen as an appropriate location for funerary rites and deposits.

As few people in the Neolithic were afforded a formal burial, the absence of remains may not necessarily indicate that monuments were without funerary connotations. The evidence highlights the very complex interrelationship between monuments and burials, and between the living and the dead, as does the presence of a number of flat graves and human remains in pits belonging to the 4th millennium BC (Garwood 2011b, 384–95). In this context, the creation of a monument may have commemorated one or several important dead people, or may have symbolised, or come to symbolise, the dead of particular communities, even if human remains were not physically present.

Just as burials are few and grave goods scarce, the deposition of other types of finds is also rare unless incorporated accidentally in ditch fills. Radley oval barrow is an exception, with the formal deposition of red deer antler and human cranial fragments to the north-west of the monuments and worked flint and pottery to the south-east, a pattern sustained over the life of the monument (Bradley 1992a, 134–5). A few other sites are also unusual in this respect. Deposits in the oval barrow ditch at Horton in the Middle Thames Valley included birch bark containers, wooden objects, polished stone axe fragments and pottery vessels (Ford & Pine 2003), perhaps associated with feasts which attended the rituals at the site. It is evident that this material was placed to be seen by the participants and perhaps also later visitors to the site. Feasting debris associated with funerary rites is also suggested for the material in the ditch fills at Staines Road Farm, Shepperton (Jones 2008) and in the barrow mound at Whiteleaf (Childe & Smith 1954).

### Some final thoughts

What these different site biographies suggest is that there was a common pool of architectural and depositional options that was widely shared and which people employed as seemed appropriate in a range of different situations.

The outcome, however, was monument constructions of very varied form. As Richard Bradley has said, this is what makes them so difficult to classify. People were not imprisoned by convention and when ideas and circumstances changed the physical appearance of monuments and/or the ways in which they were used would have been reconfigured (Bradley 1993, chapter 4).

As the major ceremonial monuments in the valley were transformed from causewayed enclosures to linear cursus monuments and then henge monuments came to dominate the wider ceremonial scene, small monuments do not exhibit the same degree of change, as though they were on a different trajectory. Perhaps, belonging to smaller communities, they were making different kinds of statement: referencing the past and unchanging values, the things which created the bond between them and made them separate from the outside world. To some extent, being different one from another may have been the point.

The 4th-millennium BC monuments appear to belong to a fluid and contingent society which did not have a dogmatic, formulaic or orchestrated response to events. Rather, individual communities appear to have been reacting to individual and specific situations but with range of shared architectural possibilities in mind. This can be set in the broader context of people moving around the landscape and making choices whether as individuals, as family groups, communities or tribes about whether, where and how to bury their dead and commemorate and celebrate those things that were central to their lives.

At a one-day conference held by the Society of Antiquaries in 1988, Richard described the distinctive archaeology of the river gravels, drawing attention to the degree of local variation in monument types and settlement patterns and calling for archaeologists to evaluate gravels archaeology on its own terms (Bradley 1992b). Many of the sites mentioned in this paper have been excavated in the two decades since, and the range of monuments examined over this period of time has justified his claim. More importantly, he has influenced the ways in which we think about these sites, encouraging us to engage with the social world of the people who built them, their intentions and consequences.

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# Landscape Archaeology and British Prehistory: questions of heuristic value

*Andrew Fleming*

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*Reflecting Richard Bradley's considerable contribution to the field, this essay offers a personal perspective on the role of the archaeology of landscape in British prehistory. It is argued that while post-processual approaches have taken the archaeology of landscape in radical new directions, they have limited the immense heuristic potential of landscape archaeology within the time depth supplied by prehistory. Three 'zones' are sketched – 'text aided', of linear features, and of sites – which outline the very different contexts of work for the landscape archaeologist, each with varying opportunities and constraints. Each offers potential for exploiting the insights of different theoretical approaches, most productively within an ideas-argument-evidence dialogue.*

In the early 1970s, the term 'landscape archaeology' was introduced as a description for a set of established field methods which had hitherto been part of normal practice for some archaeologists, but now required clearer definition and description, and explicit recognition. The failure of early exponents to 'theorise' landscape in a wider sense left a gap which was exploited by post-processual theorists of the 1990s. They critiqued 'landscape' as a prime example of the inadequacies of processualism, and went on to promote it as an area where post-processualism might best achieve its objectives, through new approaches to fieldwork and 'new ways of telling'. From a researcher's point of view, neither of these new developments is beyond

critique (Fleming 2006; Brück 2005). But in any case, the non-theorisation of landscape archaeology by its early exponents, followed by its eager if controversial adoption by post-modern theorists, means that discussion of the role of 'landscape' (the concept rather than the methodology) has often created its own dynamic, becoming tangential or perhaps even opposed to the creation and development of more systematic landscape narratives for British prehistory. This essay offers a personal perspective on the heuristic role of the archaeology of landscape in British prehistory; it is offered to Richard Bradley in recognition of the fact that he has achieved more than any other British prehistorian in this field.

## British prehistory, landscape archaeology and landscape history

The term 'landscape archaeology' was coined in the early 1970s by Mick Aston and Trevor Rowley (1974). They wanted to recognise and find a label for the heuristic energy resulting from the harnessing of the 'field archaeology' of O.G.S. Crawford and the archaeologically-inspired approach to landscape history advocated by W.G. Hoskins. Aston and Rowley sought to promote and explain landscape archaeology as a field methodology; they were much less concerned with interpretive issues, and took little interest in 'landscape' as a theoretical concept. Although they dealt explicitly with post-Roman landscapes, this was a time when landscape archaeology was also a viable concept from a prehistorian's point of view. Colin Bowen was producing compelling accounts of stratigraphic relationships between field systems, linear earthworks and hillforts in Wessex (eg, 1975), and Peter Fowler, fresh from his work on Overton Down, was eloquent in describing the 'organised prehistoric landscapes' on the Wessex chalkland (eg, 1981). One of Richard Bradley's early articles (1978), that stressed the distinction between 'cohesive' and 'aggregate' prehistoric field systems, formed a useful component of this literature. It was clearly influenced by Bowen's work. Coinciding roughly with Bowen's fresh insights into 'Celtic field systems' was the re-discovery of the reaves of Dartmoor (Fleming & Collis 1973; Fleming 1978) and Francis Pryor's early excavation campaigns on ditched Bronze Age field systems on the outskirts of Peterborough (1976). At this time there was enough new work on field systems and land boundaries to ensure the success of the famous Burwalls *Early Land Allotment* conference, in 1976 (Bowen & Fowler 1978). There had, of course been earlier discoveries of 'prehistoric landscapes', notably in Yorkshire, where Mortimer had published his coloured map of the complex pattern of linear earthworks on the Yorkshire Wolds (1905), and Raistrick his account of early fields at Grassington, in upper Wharfedale (1938).

In terms of the growth of modern landscape archaeology, then, it was ancient field systems, for the most part, which offered prehistorians a more seamless, holistic notion of 'prehistoric landscapes' than distribution maps of coeval

'sites', or the tentative scenic reconstructions of palaeo-environmentalists. After all, one cannot subject upstanding ancient field boundaries to the kind of distanced scrutiny appropriate to a smaller, more concisely 'bounded' artefact like a Beaker or a Carp's Tongue sword; they have to be explored from within. The archaeologist moves through ancient fields, is contained by them, notes how they relate to the lie of the land and what other 'features' intersect with them.

I would like to think that one of my own early articles, 'Territorial patterns in Bronze Age Wessex', was also a step in the right direction (Fleming 1971). In Cambridge, I am reliably informed, tutors used it for several years as an awful warning of what can happen when someone who is not a fully paid-up graduate of the Downing Street 'Bone Room' attempts to write about prehistoric livestock husbandry. It is a flawed piece of work, as I was aware at the time. But in the days when the topic of Bronze Age burial mounds led mostly to the distribution maps and site lists of Leslie Grinsell, or a close encounter with the excavation reports of Cyril Fox, 'Territorial Patterns' did offer new ways of thinking about prehistoric *landscape*. At present, it looks as if scientific work on the life-histories and provenances of livestock and people who were around when Stonehenge was under construction may show that some of the insights contained in this piece were not as far off the mark as previously thought (eg, Towers *et al.* 2010; Balter 2008).

Most of those who took the newly-minted sub-discipline of 'landscape archaeology' to their hearts in the 1970s were more interested in 'text-aided' contexts – deserted medieval villages, open field systems, hunting parks, polite landscapes, settlement morphology, and so on. Even now, regrettably few prehistorians belong to what one might call 'the landscape community' or publish work in its journals. In the main, landscape archaeology contributes to the construction of post-Roman landscape history – a robust and resilient discipline, rejoicing in its capacity for exploiting text-aided contexts, and in the abundance and complexity of its subject-matter. A volume which celebrates the 25th anniversary of the Society for Landscape History (Hooke 2000) is entitled *Landscape: the richest historical record* – a title which genuflects in part to the 'palimpsests' which are the stock in trade of



landscape archaeologists. Matthew Johnson (2006) has recently chided the landscape history community for preferring empiricism to new theoretical perspectives. Personally, I do not regard empiricism *per se* as the problem. As any field archaeologist knows, empiricism is a vital part of the mix; observational fieldwork is a learning process. The 'balance' between empiricism and theory is not a zero-sum game. 'More' empiricism does not necessarily mean 'less' theory; productive ideas may come from anywhere. But I can certainly sympathise with Johnson's view that the landscape history community is rather too preoccupied with following an agenda which reflects and responds to the most conspicuous categories of the archaeological record. Partly, this is the nature of the beast; landscape archaeologists are always liable – necessarily, and virtually by definition – to become deeply drawn into the process of 'reading the landscape'. Interpretation becomes a form of 'decoding', a revelation of patterns and linkages unnoticed or misunderstood by previous workers. Intriguing questions posed by the landscapes of the research area take centre stage. If we stop at this point, the resultant landscape history can easily present itself as a form of local history, largely oblivious of deeper historical questions, and permeated by a rather inward-looking landscape archaeology, preoccupied with the tricks of its own trade. Conventional, text-aided landscape history has many achievements to its credit. But more self-reflexive critiques would help to counteract its tendency to coast along as 'normal science'.

### New theoretical challenges

In the four decades since the term landscape archaeology was coined, the discipline's relationship with British *prehistory* has been very different, and more tumultuous. Landscape archaeologists working on prehistoric subject-matter who expected that they could simply continue in the tradition of Crawford and Bowen were soon confronted by new, theoretically-driven demands. With the rise of 'cognitive archaeology' in the 1970s, 'functionalist' or 'materialist' interpretations of prehistoric field systems, for instance, were brusquely dismissed in favour of questions about their symbolic or even metaphorical 'meaning' – the kind of questions rarely or never asked in

relation to *medieval* field systems. If the 'Marxist' archaeology promoted in the early 1980s had survived longer, it might have found a significant role for a 'materialist' archaeology of landscape. We will never know; for the later 1980s saw the rise of the influential theoretical paradigm known as post-processualism. By the 1990s, post-processualists had identified 'landscape' as a conspicuously under-theorised area of archaeological endeavour, given prehistorians' traditional approaches to the archaeology of landscape a critical hammering, and decided that landscape was the field in which they wanted to make their own contribution to archaeological practice (see Fleming 2006). Tilley's highly influential, much-referenced *A Phenomenology of Landscape* (1994), with its case studies of Welsh megaliths and the Dorset Cursus, championed new modes of fieldwork and presentation. By the late 1990s, 'ways of telling' had generally become more 'imaginative' in more than one sense – unsurprisingly, since post-processualists tended to promote anti-positivist attitudes.

Post-processual approaches have taken the archaeology of landscape in radical new directions. Take, for instance, the attempt to embrace the Otherness of prehistoric people. This seems an admirable if challenging quest, a stimulating counterweight to decades of 'Western', post-Enlightenment archaeological interpretation presenting itself as 'common sense'. In recent years, we have been encouraged to comprehend the mindsets of people in Melanesia and parts of India, as interpreted and presented by anthropologists – a process which has inspired the re-interpretation of the Dartmoor reaves, among other things. Helen Wickstead (2008) has recently suggested that the reaves were not essentially 'land boundaries' (except in a rather banal sense); rather they should be understood in terms of 'the technology of the self', or 'personhood'. If I understand Wickstead correctly, support for this interpretation is claimed partly on the basis of the heterogeneity and chronological depth of reaves. The actions involved in their construction represent primarily not the work of people intent on the division and allocation of land, but rather innumerable 'projects of value', performed over a long period of time – episodes in the 'construction of identity', or perhaps its recurrent performance and readjustment.

Now one may or may not 'like' this kind of

interpretation, in an aesthetic or intellectual sense. The concept of personhood (Fowler 2004), with its nuances and ambiguities, is quite complex. But the most difficult implication of this sort of work seems to be that, if we are to embrace the Otherness of prehistoric people in any serious sense, we have to enter a morass of contentious anthropological theory about non-Western mindsets which could derive from any corner of the planet, with no clear sense of how one might know which parts, if any, might be ‘appropriately’ applied to a particular ancient context. This particular quest seems to have taken us back to the perceived difficulties of the mid-1950s. But this time, we find that ‘handling’ prehistoric thought is difficult not because archaeology provides us with little relevant material (as it seemed in those days), but rather because the possibilities opened up by anthropology now seem almost infinite, as well as highly nuanced. Post-modern theorists doubtless relish the opportunities presented by this situation, but it must leave many prehistorians wondering whether it is possible to ‘work’ in this area at all, if any kind of systematic interrogation of the archaeological record is to be undertaken. The Otherness of past people may be relatively easy to ‘perform’, a ready theme for interpretive projects created by theorists and cultural commentators; but where does this leave archaeologists, whose forte is empirical investigation? Should the desiderata of the theorists drive us to attempt the impossible?

Where does this leave prehistoric landscape archaeology? As far as radical theory is concerned, it seems to me that archaeologists need neither be intimidated nor seduced by post-modernism. In historical disciplines, post-modernism plays the role of the Fool in a Shakespeare play. We need the Fool; he’s clever, he’s stimulating, he’s a foil for his patron, tells us truths and half-truths which we have so far failed to confront, makes us think about the direction we are taking. He hands us a mirror, sometimes a distorting mirror; he points out hitherto un-noticed ironies, reminds us that we don’t have to think in a linear fashion. Sometimes we don’t understand him, and perhaps we are not always meant to. He subverts established wisdom, he confuses us, and he’s fun. But even though he’s become an essential part of the performance, we’re not meant to take the Fool too seriously. In

archaeology too, we need irony, counterpoint, and those who think the unthinkable; but the Fool should not claim centre stage, for his truths are not those of our essential narrative, which is primarily historic rather than ludic.

Post-modern approaches may have insightful consequences within the strand of cultural commentary which considers how approaches to landscape, and to the archaeology of past landscapes, have reflected contemporary political ideologies – or simply, the spirit of the age. Thus both Crawford and Hoskins have been plucked out of their disciplinary contexts, becoming footnotes or parentheses in broader narratives of British cultural history. Crawford becomes less a working field archaeologist, more the principal purveyor of air photographs to a cultural elite, for whom they were a revelation (Hauser 2007). The great cultural quest of the 1930s was for an ideological and artistic accommodation with ‘modernism’; and in such an exploration, the idea of Britain as ‘an old country’ resonated deeply (Harris 2010). The soft green curves of the most prominent prehistoric monuments in Wessex fed into the art of Paul Nash, for example, and excited the imaginations of other artists and intellectuals. W.G. Hoskins, too, often gets a brief mention in cultural commentary. On the basis of one or two oft-quoted remarks, he is often portrayed as a reactionary anti-modernist. Labelled (justly) as a Romantic (though his affection for Wordsworth was only one aspect of his mindset), Hoskins has become politically suspect for those commentators who prefer to put labels on scholars and cast them characterise primarily as symbols of the *zeitgeist*. In such commentaries, archaeologists’ interpretations are significant only insofar as they express or reflect contemporary political or ideological concerns. From the perspective of post-modern cultural historians, the naïve positivism of ‘scientific’ archaeologists who attempt to reconstruct or re-create the past makes their endeavours almost laughable (eg, Smiles 1994). For cultural commentators, these are significant insights; but they are of little help to prehistorians.

## Questions of heuristic value

If ‘landscape’ is a concept of infinite elasticity, so, at the present time, is ‘landscape archaeology’. The first international landscape archaeology

conference (LAC-01), held in Amsterdam in January 2010, was dominated by positivist, empiricist approaches and the florescence of 'the GIS revolution'; few anthropological insights were on offer, let alone free-wheeling post-modern commentary. The 'landscape archaeology' presented in the *Handbook of Landscape Archaeology*, first published in 2008, which is a 'World Archaeological Congress Research Handbook in Archaeology', is much broader in scope (David & Thomas 2008). Here 'landscape' becomes the vehicle for stimulating debates and presentations of all kinds. Two-fifths of the handbook are devoted to scientific procedures, from charcoals to DNA, from field-walking to GIS; the rest deals with all manner of landscape concerns, including political, ethical and heritage issues – contested landscapes, heritage management, and relationships with indigenous peoples. Many of these contributions are stimulating. Personally, I distinguish the term 'landscape archaeology' from the phrase 'the archaeology of landscape', and would prefer it to be used primarily in the sense in which it was originally coined, to denote the investigative version of the discipline. Although there are undoubtedly reciprocal relationships between investigation and interpretation (and indeed more discursive commentary) the two are not as inextricably intertwined as some post-processual writers would have us believe. One has only to think of the parallel activity of journalism, where writing based on original investigation is very different from that based on the personal experience of watching a new film, say, or a cricket match, and different again from political commentary and rhetoric.

Landscape archaeology, then, has become one of the playthings of theoretical debate. Fortunately, the heuristic value of landscape archaeology as a research method has not been undermined in this process. This has been powerfully demonstrated by the work of Richard Bradley, who has worked on the 'meaning' of prehistoric landscapes for at least twenty years now, developing an intricate and persuasive dialogue between ideas, argument and evidence, with little reliance on rhetoric. He has eschewed the deployment of fieldwork in the service of an abstract ideological position; he's a researcher, so you won't catch him in the 'I'm going to say this anyway, whatever the evidence' mode. He's also a realist, which

means developing an understanding of the opportunities and possibilities presented by chosen facets of the archaeological record. Above all, he has demonstrated that the quest for meaning only becomes meaningful itself if one approaches the question in the context supplied, and at the appropriate scale. Perhaps the most striking case in point is his treatment of the 'rock art' of Neolithic Britain, Ireland and Galicia (Bradley 1997). Before Bradley started work, over one hundred speculative interpretations of the 'meanings' of these carvings had been put forward. It was Bradley's insight that, in the first instance, 'meaning' is not a matter of 'decoding' the carvings as 'texts', but rather a question inseparable from context, in this case landscape context. So he attempted to discover whether there was patterning in the locations where the carvings were on display, and on the occasions when prehistoric people were likely to have encountered the carvings. It was not at all obvious how to 'read' meanings from such a limited set of 'motifs', where the juxtaposition of the motifs and the sequence in which they were carved may have been as important as their 'intrinsic' meanings; furthermore, it is quite likely that 'meanings' were dormant or potential, only brought to life when interpreted, or when featuring within some kind of story-telling performance. But it was possible to develop an index of complexity for the petroglyphs, and also to note which rocks had been chosen for carving, which ones ignored. Above all, as apparent relationships between carvings and particular landscape locations began to emerge, Bradley made serious attempts to discover whether they were likely to have been intended or were coincidental. How his students reacted to being told to tramp across the hills to establish 'control points', or to dig test pits in locations chosen for their randomness, is not recorded; perhaps they took it in good part. Be that as it may, Bradley's work on the petroglyphs seems to me a triumph for the ideas-argument-evidence dialogue, achieved with the most apparently unpromising material. It also demonstrates the efficacy of that other archaeological virtue, faith; a large part of making progress involves holding fast to the belief that progress is possible. Positivism often calls for the exercise of the imagination! Of course, Bradley's work on rock art is not his only contribution to the development of a credible

landscape archaeology for prehistorians; there was also, for instance, his ground-breaking *An Archaeology of Natural Places* (2000), which in many respects developed an earlier train of thought about the origins of megalithic tombs (1993).

### **Landscape history in deep time: questions of scale**

The quest of the landscape archaeologist who is also a prehistorian is, of course, *difficult* in a hermeneutic sense. In terms of that hoary old metaphor, the palimpsest, the older scripts become not only more ‘over-written’, so that they are more patchy and piecemeal; they are also harder to read in themselves. One might label the uppermost, ‘text-aided’ zone provided by written documents, standing buildings and place-names as Zone 1. Going deeper into the past, Zone 2 might be described as the zone of linear features. In this zone there are, at least, Roman roads, linear earthworks and extensive ‘field systems’, as well as more complex settlements such as Roman towns or hillforts (sometimes preserved as earthworks, but more often as crop- or soil-marks on air photographs). As well as being component parts of extinct ‘cultural landscapes’, the linear features within these local ‘archaeological landscapes’ demonstrate numerous intersections and relationships, as their different components ‘slight’ or ‘respect’ each other. These recur frequently enough for us to observe meaningful patterns, and to use the ‘compare and contrast’ strategy productively. Linear and grid features tend to represent unitary chronological horizons, or at least once-coherent concepts. The deposits which they seal thus offer opportunities for carefully structured palaeo-environmental sampling programmes designed to study spatial variation, among other things; this introduces a culture/nature dialogue that is now being quite well exploited. The palaeo-environmental record acts in a way analogous to the written record in Zone 1, as a partner in a dialogue with an archaeologically-based cultural history.

In Britain, Zone 2 is roughly synonymous with the archaeological landscapes of the period from the mid-2nd millennium BC onwards, and no doubt the potential for doing constructive work here is aided by the fact that population levels and densities were

high enough for many areas to be not only occupied but also ‘claimed’, in an increasingly territorial sense. If this is the case, this sets up a whole series of expectations involving density-dependent effects, at least to some extent. These cannot be explored here, though they must surely relate to new contexts of emulation, of categorisation, of setting boundaries, of the attempted consolidation of hierarchy, and much else. Although the transitions must have been gradual and piecemeal, from the archaeologist’s long-term perspective a definite horizon is discernible here, perhaps marked initially by the growth of extensive field systems and linear earthworks in some areas during the Bronze Age. This horizon was perhaps most thoughtfully defined by John Barrett (1994), though characteristically Bradley was also involved in exploring it at an early stage (Bradley *et al.* 1994), and his pupil David Yates (2007) has made a significant contribution in this field. The importance of this horizon within British prehistory, and the immense opportunities for systematic work which it offers, largely still await recognition. How to work methodically within the ‘zone of linearity’ is not yet very well understood; perhaps we would do well not to make exaggerated claims for conclusions drawn from field archaeology unsupported by targeted excavation.

Going back still further in time, Zone 3 is the zone of ‘sites’ – the ceremonial monument, the small-scale settlement, the lithic scatter. We are well aware that such ‘sites’ were but small components of ‘landscapes’, landscapes perhaps more ‘natural’ than ‘cultural’ to our way of thinking, though this does not necessarily imply a lack of engagement with the wider landscape on the part of prehistoric people, in terms of knowledge, exploitation and the assignment of cosmological meaning. The relatively low population densities of Neolithic and Mesolithic Britain mean inevitably that landscape archaeologists are ‘joining the dots’ – extrapolating from known ‘sites’ and from places providing palaeo-environmental data. Inevitably too, perhaps, in the minds of archaeologists, the natural landscape tends to fill the vacuum created by the physical limitations of archaeological ‘sites’; with chronological distance, taking a few steps towards geographical determinism seems a pardonable avenue of approach. Perhaps it is unsurprising that so many have found the



ideas put forward in Tilley's *A Phenomenology of Archaeology* stimulating – the phrase ‘places, paths and monuments’ apparently describes the ideal linking narrative. It seems that if only a connection might be made between megalithic tombs (or other ceremonial monuments) and distant hills, nearby watercourses, or other geographical features, we might have a networked archaeological landscape to work with, instead of disparate sites. ‘Phenomenological’ fieldwork may indeed bring about this revolution, though if it is to carry conviction it will have to transcend some of its early problems (Fleming 1999; 2005; 2006). It will need to take the road followed by archaeoastronomy, and devise more rigorous programmes for testing the validity of apparently significant patterns and relationships; in other words, it will need to adopt something like the Bradley approach to petroglyphs.

Each of the zones outlined here requires different approaches which accord with the nature of the archaeological record and of cognate studies of, for example, the palaeo-environmental record and documentary sources. Each offers particular opportunities, rooted partly in the nature of the material but also in long-term human ecology – questions of the distribution and density of population, of the fixity or mobility of settlement and the nature of the food quest, the degree of socio-political integration and the geographical reach and effectiveness of political control, and so on. More reflection and work on these themes, and others, should provide the ‘context’ which, for Julian Thomas (2008, 301), is necessary in order to combat any tendencies towards an ‘ultimately narcissistic’ unbridled subjectivism in experiential or phenomenological field studies, and might address what Matthew Johnson perceives as the theoretical poverty of contemporary landscape archaeology. Here I am advocating a relatively ‘soft’ version of the ‘human ecology’ approach – which is in practice largely a version of ‘soft’ processualism – but with less emphasis on quantification, evolutionary pay-offs, calorific inputs and outputs, and mathematical formulae, and more on cognitive archaeology, ethnographically-based understanding and insight, and long-term trends and transitions. If we are to heed Thomas's call for ‘context’, we may have to revisit some aims and objectives which have

hitherto been discarded as ‘too processual’.

For each zone, too, it will be important to bring the scale at which the archaeologist operates into some kind of alignment with the scale at which the relevant prehistoric people inhabited their landscapes. For recent centuries (Zone 1), the scale of landscape analysis – the manor, the parish, the township, the hundred, the shire and so on – seems obvious, and provides its own opportunities, though its relative fixity is arguably a constraint on our thinking. In Zone 3 – especially for hunter/gatherer contexts – questions of scale seem quite intimidating in the light of the divergence between the available archaeological record and the geographical scale which we need to address (involving probably vast and discontinuous hunting ranges and ‘territories’, for example). However, detailed studies of lithic traditions and the procurement of raw materials, in association with palaeo-environmental studies, ecological understanding and ethnographic insights, can take us a long way. Questions of scale are challenging for the landscape archaeologist, but at least we have come to understand that the scale has to *encompass* small clusters of ‘Celtic fields’ and individual barrow cemeteries, rather than being derived from the fieldworker's perceptions of their immediate neighbourhoods. (I imagine that the phenomenological approach, if it survives to operate in Zone 2, may also have to vary its perceptions of scale.) It is also important to emphasise that, as John Barrett's work has taught us, the exploration of questions of scale in Zone 2 involves much broader and deeper issues than ‘the origin of coaxial field systems’, interesting and significant though that question may be. Perhaps after a couple of decades of cognitive awareness, prehistorians' approaches to the ‘origins’ of very large field systems and land boundaries may be able to avoid some of the pitfalls of over-empirical approaches, and take a different path from that taken by those who have wrestled with the origins of medieval open field systems. Scale is neither an abstract geographical quantum nor an independent variable; it is related to factors of socio-political and economic ‘reach’ and perception, and will be better understood in British prehistory when we develop better models of socio-political ‘development’ than we have felt able to achieve in recent years (Fleming 2004) – ‘archaeologies of power’, perhaps. We do not have to use

phrases like ‘social evolution’, or ‘social archaeology’, but in terms of past human ecology, we do need to put something into the space which these concepts once occupied, which is not adequately filled by ‘technologies of the self’, or attempts to imagine ancient metaphorical thinking.

The three zones sketched above represent very different contexts of work for the landscape archaeologist, with varying opportunities and constraints, and, it has to be said, the potential for exploiting the insights of different theoretical approaches. (‘Thick description’, perhaps an ‘Annales’ approach, might be almost mandatory for work in the post-medieval period, whilst greater concern for evolutionary perspectives might bring greater dividends in the Palaeolithic.) I am not proposing that the nature of the archaeological record should bring about three largely separate theoretical approaches for landscape archaeology; that surely would be a triumph too far for empiricism. But archaeology will always be situational and opportunistic, not only in its practice but also, I am afraid, in choosing the most productive theoretical insights.

Above all, the record of prehistory provides us with opportunities to write about culture change, to work with a historical dynamic, to consider how the past informed the present in prehistory. The latter is a topic to which post-modernism has made little contribution so far, although again, Richard Bradley (2002) has had some challenging things to say about these issues. Here there are themes which run through deep time, and require working through, taking advantages of particular opportunities within the zones which I have identified above. Above all, the superficial theoretical debates of recent years should not divert our attention from the immense heuristic potential of landscape archaeology within the time depth supplied by prehistory, which surely deserves more concentrated, thoughtful endeavour.

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# Cursus Continuum: further discoveries in the Dorset Cursus environs, Cranborne Chase, Dorset

*Martin Green*

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*This paper presents some of the more significant discoveries made in the last few years on and around Down Farm on Cranborne Chase, a 'central place' in Richard Bradley and John Barrett's Cranborne Chase Project of the 1970s and '80s. Excavation of a barrow on Canada Farm recovered crouched adult male skeleton in a rectangular coffin-shaped recess accompanied by an antler 'toggle' or pendant and two slivers from a boar's tusk with a fine Wessex/Middle Rhine beaker laid over his feet. Close examination of the bones suggested that the body had been subject to exposure and may have been curated and interred as a 'mummy'. A post-hole setting nearby could conceivably have been an exposure platform. A series of Middle Bronze Age burials was inserted into the barrow. A chance discovery within the Dorset Cursus 240 m away from this barrow led to the excavation of a shallow grave, backfilled with flint nodules containing an elderly female c. 50+, holding a small flint fabricator, which was also dated to the Middle Bronze Age.*

I first met Richard in 1977 when he came to see me at Down Farm with a proposal. He and colleague John Barrett were planning a field project to survey the prehistory of the region following the transfer of the Pitt Rivers Cranborne Chase material from Farnham to Salisbury Museums. He had heard of my own fieldwork including my first excavation which I had embarked upon the previous year. When he visited I had traced the outline of a three-sided ditched enclosure and had just uncovered three post-holes in an arc, which I was hoping could be the start of a round-house. Richard thought so too and invited me

to join the team of what became known as the 'Cranborne Chase Project', which was for me a wonderful opportunity to be involved in research at the forefront of prehistoric studies in Britain at the time. Eight years of fieldwork ensued including the first excavations of the spectacular Dorset Cursus, the longest Neolithic monument in Britain. A similar period was spent on analysis and synthesis culminating in two volumes published in 1991 (Barrett *et al.* 1991a; 1991b).

Following publication we were all aware that much remained to be discovered and that I, being on the spot, was in an ideal situation



to coordinate future studies. I have continued to do this (Green & Allen 1997; Green 2000; French *et al.* 2007) and this paper represents some of the more significant discoveries made in the last few years which I present to Richard as a small token of thanks for his ever present practical help, encouragement and above all enthusiasm, he has shown over the years.

### Canada Farm barrow

I first spotted this barrow (Fig. 9.1) as a faint ring-ditch just visible in freshly ploughed land in 1972. It lay some 20 m outside the boundary of Fir Tree field and a similar distance from the northern edge of the Cursus, 160 m due south of the ring-ditch excavated during the Cranborne Chase Project (Fig. 9.2; Barrett *et al.*

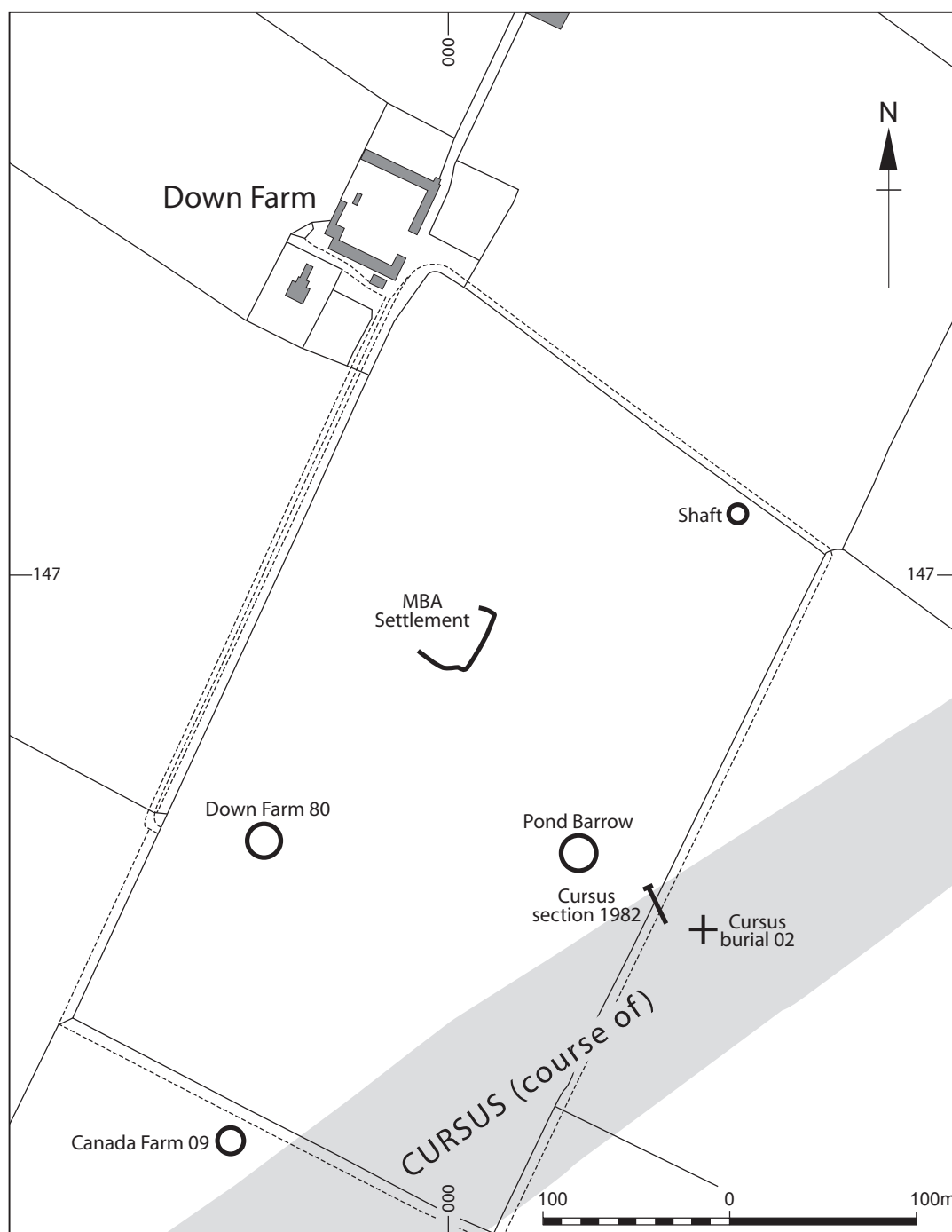


Figure 9.1: Plan Fir Tree field location with sites (illustration: Rob Read)

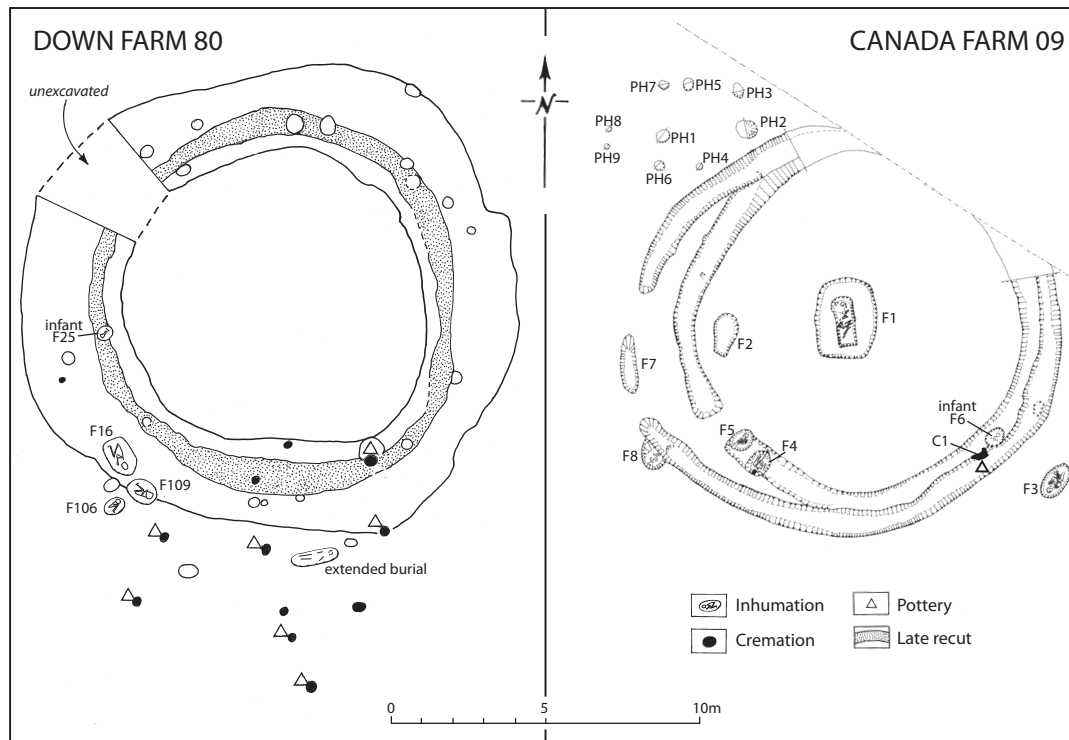


Figure 9.2: Plan of Down Farm and Canada Farm ring-ditches side by side (illustration: Rob Read)

1991; 1991b). In 2007 during a field exercise by Bournemouth University students, under the guidance of Paul Cheetham, a geophysics survey was undertaken which revealed weak indications of the ditch and a large central feature. The site was clearly continuing to be plough degraded and a decision was made to excavate it in 2009.

Stripping of the shallow ploughsoil revealed two phases of ditch which partly impinged on each other. The outer ditch had an internal diameter of 11.5 m, external diameter of 13 m, and an average depth of 0.4 m. The inner ditch, which partly cuts the outer, had an inner diameter of 10 m, external of 11.5 m and an average depth of 0.1 m. The deeply truncated ditches accounted for the poor geophysics resolution.

The outer ditch had a 4 m wide gap to the west although this was partly filled by a shallow elongated pit F7. The inner ditch had a metre wide causeway to the south-west. A part of the eastern side of the ditches was left unexcavated due to the proximity of a farm track.

The large, entirely rubble packed primary burial pit (F1) was  $2.6 \times 2 \times 0.45$  m deep and bore no signs of disturbance. A rectangular coffin-shaped recess 5 cm deep had been cut into the floor within which was a crouched adult

male skeleton on his left side facing to the east (Fig. 9.3). There was some re-arrangement of the bones including the removal and placement of the mandible in the north corner of the cut. Touching the mandible was a weathered antler toggle or pendant (see Fitzpatrick 2011, 58–9 for a discussion of these) and two slivers from a boar's tusk. A fine Wessex/Middle Rhine beaker lay over the feet with a single flint flake lying beneath it. A radiocarbon date was obtained from the skeleton  $4091 \pm 25$  BP (NZA-34641) which calibrates to 2620–2470 cal BC. This was a remarkably early date actually just pre-dating the start of the Beaker phase as currently defined; it falls very early in the range of modelled Beaker dates for southern Britain (see Healy 2012). Because of this date, together with the association with the W/MR beaker, which from current knowledge should be later, a second date was obtained. This was kindly supplied through the auspices of Professor Mike Parker Pearson via the Beaker People Isotope Project. This gave a different result  $3900 \pm 30$  BP (SUERC-32210) which calibrates to 2470–2290 cal BC. We cannot accept or reject one result without due justification (or a third determination). When the two results are combined they fail the T-test ( $df=1$ ,  $T=9.3$  ( $5\%3.8$ )), indicating that there is an error with

Figure 9.3: Photo  
Canada Farm  
(CFO9F1) Beaker  
burial



one result. The weighted mean of the two dates gives 2570–2460 cal BC as the best estimate of age of this individual, though we suspect that 2470–2290 cal BC to be nearer the truer date (M. Allen, pers. comm.).

Examination of the skeleton (O'Malley 2010) suggested the man was aged between 25 and 30 years old and had suffered a head injury, which had partly healed. He had also undergone short-term exposure and it was clear that defleshing was incomplete when the remains were interred. Evidence of carnivore scavenging was present. The disarticulation of the mandible would have occurred early and during this process the left arm may have been disturbed and the right arm moved out of the way. It appears that several visits may have been made to the body before final burial took

place. Although later, the second radiocarbon date still appears too early for the W/MR Beaker association and it remains an intriguing possibility that the burial may represent a curated corpse/mummy. Intriguingly the corpse was articulated in a crouched, flexed or bound position, and at one end of a probable rectangular wooden coffin – almost as if the crouched body had slid to, or been placed at, one end when the coffin was interred. The fact the lower mandible was detached and placed with the antler toggle suggest the corpse was articulated but desiccated (?mummified). Similar suggestions of the curation and burial of intact desiccated or mummified remains at a date possibly some time after death are also being made as a result of re-analysis and dating of the Neolithic Wor Barrow interments (M.



Allen, pers. comm.). Nitrogen levels revealed that a large part of his dietary protein was from animal sources and Strontium isotope levels indicated he was native to the chalk.

Some 2.5 m to the west of F1 was a second feature (F2). This oval clay silt filled feature only survived to a depth of 0.1 m. In its northern end was a complete, though crushed small European Bell Beaker. Although no bones were found it is likely this was another burial, which had been ploughed away or dissolved in the acidic clay silt fill.

A roughly square ( $3 \times 3$  m) setting of post-holes (PH1–7) lay just to the north of the ring-ditches with a further two (PH8–9) possibly forming an entrance to the structure. No significant finds were found in the post-holes but radiocarbon samples were retrieved. It is tempting, in light of the evidence for exhumation of the primary burial, to suggest that this may be an exposure platform.

Associated with the second phase ditch were five contracted inhumations (F3–F6 & F8) and a single cremation. The latter was a scatter with Middle Bronze Age sherds just south-west of the infant grave F6, which had been cut into the ditch. Lying close by, but outside the ditch to the south-east was a further grave, F3, which had been filled with flint nodules. Two further graves had been cut into the southern terminal of the phase 2 ditch with a third almost ploughed away nearby, overlying the southern terminal of the phase 1 ditch.

Radiocarbon dates were obtained for F3 and F4 of 1620–1500 cal BC ( $3275 \pm 20$ BP, NZA-4642) and 1500–1390 cal BC ( $3157 \pm 25$ BP, NZA-34643) respectively.

Preliminary analysis of these burials (Bailey 2011) has revealed cut marks on two of the individuals (F3 and F4) and remarkably, drill holes present in the long bones of F3 and F5. This may suggest elaborate treatment of the partly defleshed corpses prior to burial, even including stringing together some of the limbs.

## Cursus burial

During a casual walk along a plough finish-off (a slight trench formed by the final pass of the plough) in December 2002, I noticed some dark soil and a few large flints at one point. Subsequent excavation revealed a crouched burial had been disturbed by the pass of the



Figure 9.4: Photo *Cursus* burial in plough finish-off

plough within the course of the *Cursus* (Fig. 9.4). The burial lay 260 m from the Canada Farm barrow and 70 m from the pond barrow (Fig. 9.1) investigated in 1981/2 (Barrett *et al.* 1991a; 1991b).

The shallow grave had been largely backfilled with flint nodules, which had resulted in some pulverisation of the bone. Examination by Jacqueline McKinley revealed the burial was of an elderly female *c.* 50+ and within her hand was a small flint fabricator. Radiocarbon dating provided within the 'Beaker People Isotope Project' gave a date of 1610–1440 cal BC ( $3244 \pm 29$ BP, OxA-V-2271-31).

## Discussion

Clearly the gentle knoll to the south of Down Farm and to the north of the *Cursus*, largely enclosed by Fir Tree field, was a major focus of activity particularly of a ritual and burial nature during the 3rd and 2nd millennia BC. Within the Shaft was a Beaker horizon and very close by were Grooved Ware and Beaker period pits with special deposits (Green & Allen 1997; Allen & Green 1998; French *et al.* 2007). Underlying the Down Farm enclosure (Barrett *et al.* 1991a; 1991b) were further Grooved Ware



Figure 9.5: Restored  
Down Farm barrow



pits of similar character. Underlying the pond barrow were numbers of Beaker pits and the Cursus ditch excavated nearby also revealed a Beaker horizon (Barrett *et al.* 1991a; 1991b).

Furthermore, comparison of the Down Farm (*ibid.*) and Canada Farm ring-ditches (Fig. 9.2) shows that they share very similar biographies. Although no primary burial survived at the former the first phase is clearly associated with Beaker pottery. Then followed phases of recutting, two in the case of Down Farm, one at Canada Farm. Associated with both sites are single infant burials dug into the recut ditches. A number of contracted burials were added to both sites within the ditches and just outside during the Middle Bronze Age. Furthermore, numbers of cremations were inserted into the ditch and just outside at Down Farm with a single cremation within the ditch at Canada Farm, all associated with Middle Bronze Age ceramics. The Down Farm ring-ditch has recently had its mound reinstated and the contracted burials marked (Fig. 9.5).

Finally what of the contemporary settlements? The pit clusters and stake-holes of Grooved Ware and Beaker date underlying the Down Farm enclosure and pond barrow respectively are likely to be all that survives of occupation sites (Green 2000, 102).

The settlement for the Middle Bronze Age individuals uncovered at the Down Farm ring-ditch was excavated nearby (*ibid.*; Barrett *et al.* 1991a; 1991b) but what of those revealed at Canada Farm? Field walking just to the north-west of the ring-ditch has produced flintwork of Middle Bronze Age character and a quartzite pounder. It is likely the settlement lies in this area.

### Future work

The research potential provided by the human remains discovered in this small but intensively used area is very high. With the limited work so far we have been able to reveal one of the earliest Beaker burials not only within Wessex but within the whole of the UK. Pathological studies have revealed a complex series of rituals through which the body passed before final burial. Elaborate treatment of the contracted burials is also indicated. The possibility of family relationships being revealed through DNA and further analyses remains an intriguing prospect for the future.

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## Prehistoric Woodland Ecology

*Martin Bell and Gordon Noble*

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*Were Mesolithic and Neolithic relationships with woodland different and, if so, in what ways? Were ecological transformations so great as to validate the concept of Neolithic 'revolution'? Drawing upon ecological frameworks that see people as part of nature rather than an external pathology upon it, the character of woodland and human relations with it during the Mesolithic and Neolithic of Britain are explored. It is stressed that the story is no longer, as it once appeared, that of humanity's unrelenting struggle against the dark forces of the wildwood, but one of how woodland was perceived, manipulated and managed as an integral part of the context of hunter-gatherer and early farming lifeways.*

From some of his early papers to his most recent, Richard Bradley has drawn on evidence for the landscape and environmental setting of prehistoric sites to enhance understanding of their social significance. Several of his early works drew on the then developing field of environmental archaeology and its relation to the distribution and nature of evidence from prehistoric sites. This was part of a move beyond the consideration of individual sites to broader landscapes. Thus Bradley (1972) considered the distribution of Neolithic artefacts in relation to pollen evidence for the clearance history of the Lake District. Then in 1978 he considered clearance history in relation to the setting and history of barrows and other sites of lowland Britain (Bradley 1978a); and *The Prehistoric Settlement of Britain* (Bradley 1978b) was explicitly framed in a landscape and

environmental context. More recently, *Altering the Earth* (Bradley 1993) looked at the role of human agency in landscape transformation and in *An Archaeology of Natural Places* (Bradley 2000) the attribution of social significance to landscape features takes on yet a more prominent role. Through these and other works there is a preoccupying theme of what nature means to people, how they have transformed it with monuments and how the manner of their transformation has affected subsequent generations. In early prehistory this has a good deal to do with woodland, its ecological structure and social significance. Here there is potential for constructive tension between scientific and social perspectives which manifests itself in the contrasting ways we conceptualise the two cultural periods considered here: the Mesolithic and Neolithic. Bradley (1984,

11) caricatured this by the memorable and oft-quoted statement that ‘farmers have social relations with one another, but hunter-gatherers have ecological relationships with hazelnuts’. But were Mesolithic and Neolithic relationships with woodland different, and, if so, in what ways? Were transformations so great as to validate the concept of Neolithic ‘revolution’ which Finlayson and Warren (2010) have recently critiqued from other perspectives?

A main theme in environmental archaeology through the second half of the 20th century was the history of clearance. That has been most valuable in establishing the previous history, contemporary context and subsequent histories of sites selected for monuments as exemplified by Evans’ (1972) pioneering molluscan work on the English chalk and by Bradley (1978b). An increasing range of sources of palaeoenvironmental evidence facilitates multi-proxy investigations, integrating evidence from several sources, which provide evidence on contrasting spatial and temporal scales. Further there are geographic contrasts in the types of sites, either because of availability (eg, peat distribution), or because of regionally different academic traditions, including greater emphasis on either off-site or on-site palaeoenvironmental investigations. As the density and range of palaeoenvironmental sites increases so it has become possible to move from a site specific approach to the environmental reconstructions of landscapes, including their clearance history as Allen (1997) has done in the Stonehenge landscape.

Whilst clearance histories are illuminating they can lead to an over-emphasis on the opposition between people and nature. McGlade (1995) and Ingold (2000) present an alternative perspective, arguing we should see people as part of nature not as an external pathology upon it. Early ecological studies sought to identify a natural ecology of succession towards stable climax in which human agency was factored out. There is now wide acceptance that many ecosystems once regarded as natural show evidence for long histories of human agency. Ideas about ecology have also changed, with greater emphasis on dynamism, the role of contingency and disturbance factors (Worster 1990; Simmons 1999; Huggett 1995). In the UK major storm events such as occurred during October 1987 were influential

in focusing palaeoenvironmentalists on the ecological significance of extreme weather events (Fig. 10.1a; Brown 1997). Recognition of the significance of disturbance factors is important for archaeology because it means that human agency can take its place in a spectrum of factors (Bell & Walker 2005, 182). These include the effects of storms, floods, faunal agents, disease, wildfire, etc. It is particularly important that the range of factors is considered because it is increasingly becoming clear how interrelated they are, one often setting up the preconditions for another. Thus storms and beavers (Coles 2006) create openings attractive to grazing animals and people; human clearance may attract herbivores or precondition plant communities to disease, etc. It is not a question of one or the other, human agency or natural environmental change, but sometimes co-evolutionary relationships between factors (McGlade 1995).

### **Mesolithic wildwood: some disturbing signs**

The traditional view has been that the mid-Holocene British Isles and western Europe were densely wooded. The species composition of woodland varies geographically reflecting geology, soils, climate, altitude, etc. The nature of the woodland succession has been established in detail by pollen analysis which at the very broad scale indicates a picture of an essentially tree covered landscape with a species succession reflecting the distance taxa travelled, the colonising ability of species, soil maturation, etc (Huntley & Birks 1983). Palynology, coupled with consideration of soils and geology, facilitated a reconstruction map of the dominant woodland types in the British Isles just before the elm decline *c.* 5000 BP (Bennett 1989). Broad scale patterns of woodland type are relevant in terms of the contrasting opportunities they offered to human communities. Spikins (2000) has modelled changing vegetation patterns in northern Britain between 10,000–5000 BP showing that earlier Mesolithic birch and hazel woodland in the lowlands later gave way to less productive woodland, perhaps explaining a later Mesolithic shift to more productive uplands.

Focusing down from the broad scale to a more local scale the picture becomes more



Figure 10.1: Subsoil hollows and tree throw:  
 a) Tree throw in a wood at Brighton,  
 East Sussex after a storm on 16.10.1987  
 (photo. *Evening Argus*,  
 Brighton); b) hollow  
 representing a fossil tree  
 hole at Itford Bottom,  
 East Sussex with a basal  
 conifer charcoal layer  
 dated 8200–7600 cal  
 BC (8770±85BP, BM-  
 1544), scale 2 m (photo.  
 B. Westley)



complex and the model of continuous woodland more open to question. The principal ecological challenge to a closed woodland model has come from Vera (2000) who argues that the mid-Holocene woodland was more open and park-like and was maintained by the activities of grazing animals especially deer. He argues that studies of vegetation succession on nature conservation sites have indicated that oak and hazel, two prominent taxa in mid-Holocene woodland, cannot regenerate in closed woodland. However, Bradshaw *et al.* (2003) have challenged this thesis, demonstrating that oak and hazel were abundant in Ireland and Zealand, Denmark, at times when, due to factors of island biogeography, grazing animals were few. Furthermore where mid-Holocene trees are preserved in coastal submerged forests (Fig. 10.2a; Bell 2007), or the Fenland (Godwin 1978, pl. 14), they are tall straight trunked trees sometimes 10–15 m to the first branch and thus of a form characteristic of growth

in closed woodland, in contrast to the low branched forms which characterise parkland trees of more open landscapes. It must be acknowledged, however, that pollen analysis has its limitations in establishing the relative proportions of woodland and open country taxa. Abundant pollen production by trees tends to swamp other taxa and experimental studies have shown that grazing suppresses pollen production in open country taxa (Groenman-van Waateringe 1993; Göransson 1994). When palaeoenvironmental studies draw on a wider range of sources such as insects, molluscs and seeds they do sometimes provide evidence for a proportion of open ground taxa in early- to mid-Holocene woodlands. This is the case with some Mesolithic insect assemblages (Dinnin & Sadler 1999). In the Stonehenge landscape, openings included those associated with Mesolithic timber post settings (Allen 1997), and some mollusc analyses (eg, by Evans (1972) at South Street) point to open woodland. A synthesis by Whitehouse and Smith (2004), drawing particularly on the insect evidence, envisages a landscape which was predominantly wooded with patchy openings rather than the park-like landscape of Vera.

What may appear contradictory indications of closed woodland or openness can be reconciled in terms of spatial variation and patch dynamics (Pickett & White 1985; Simmons 2001). Vera's thesis highlights the role of disturbance factors and patch dynamics, but was misleading in placing so much emphasis on a single disturbance factor, grazing herbivores, rather than considering the spectrum of disturbance factors noted in the introduction. Furthermore his model makes an implicit assumption that disturbance was evenly distributed to create a park-like landscape. This would certainly not be true of grazing animals, the activities of which would be particularly concentrated adjacent to water bodies, lakes and river sides, woodland edges at the coast and also in the frequented routes of animal migration such as passes connecting valley systems. These are the very places where, in later periods, Bradley (1997) has identified concentrations of rock art. In such areas of concentrated animal activity, the woodland is likely to have been interrupted by openings and, where frequented routes existed, by more open corridors. The other disturbance factors unconsidered by Vera are likely to have had similarly patchy distributions: floods, for

example will impact more on coastal or riverine topographic contexts and storms are likely to cause more frequent tree throw in specific topographies and soils (Fig. 10.1a), and beavers will impact on certain river valley situations, etc. Once an opening has been created in any given situation, it is likely to be perpetuated by grazing animals (Buckland & Edwards 1984). In other areas where the disturbance factors were less marked or subsequent use minimal, the dense climax woodland indicated by much of the palaeoenvironmental record would be present or could regenerate.

A further important cause of spatial variability in earlier Holocene woodland is human agency. At one time it was considered that the activities of Mesolithic communities were significantly determined by natural environmental changes such as vegetation succession, sea-level rise, climate change, etc, but their effect on the environment was very limited. That view has tended to persist in continental Europe but is increasingly challenged by evidence from the British Isles. The evidence came initially from the uplands, the Pennines, North York Moors, Brecon Beacons and Dartmoor, where there is evidence for a reduction in the treeline during the Mesolithic and an increase in open taxa sometimes with charcoal, indicating burning (Fig. 10.1b), and on some sites the change was associated with Mesolithic artefact scatters. This evidence assembled from the palaeoecological studies of Dimbleby (1985), Simmons (1996), Smith (1970) and Mellars (1976) drew on ethnographic evidence to suggest that burning by hunter-gatherers in many parts of the world took place in order to increase plant resources and the abundance of animals which grazed on them. Wildlife management experiments showed seven-fold increases in herbivore abundance in woods subject to burning. Initially the evidence for woodland opening and burning seemed to be mainly restricted to the uplands and to be concentrated in the later Mesolithic (Simmons 1996), suggesting that it may have been an evolutionary development resulting from population growth and packing following the significant loss of land with the flooding of coastal areas such as Doggerland (Gaffney *et al.* 2009). However, that intuitively attractive model is now changing rapidly. The most convincing evidence for cyclical woodland reduction associated with burning

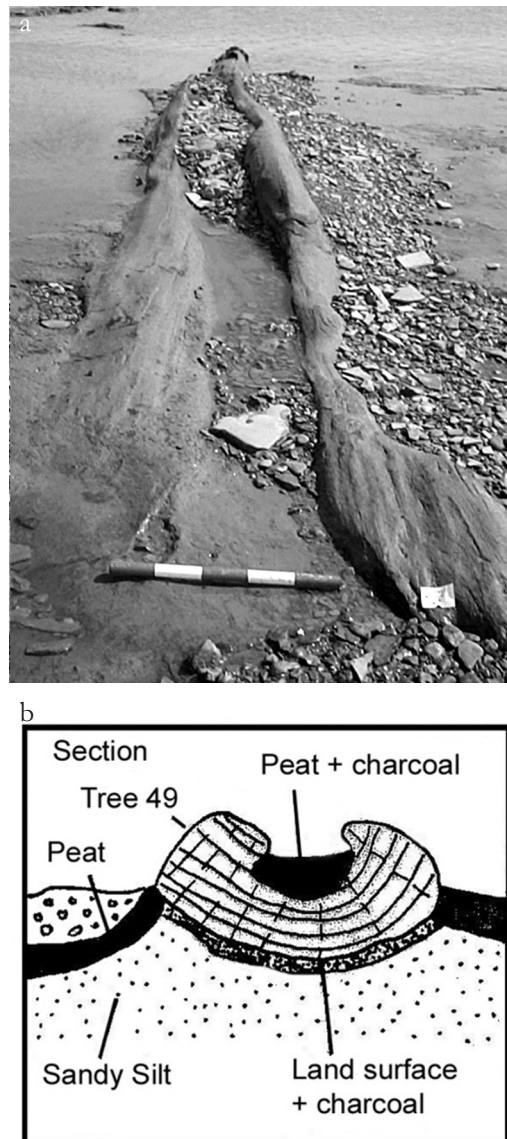


Figure 10.2 a) Submerged forest tree, in the intertidal zone Goldcliff East, Wales c. 6450 cal BC associated with a charcoal spread 540m from the nearest known Mesolithic settlement, scale 0.5 m (photo. S. Timpany); b) section shows the relationship of the tree to the old land surface and charcoal

and contemporary Mesolithic activity comes from the very beginning of the period within a few hundred years of late glacial/Holocene transition where it is attested in the near contemporary lowland river valley/lake situations at Star Carr, Yorkshire (Mellars & Dark 1998) and at Thatcham, Berkshire (Barnett 2009). Secondly, the investigation of coastal Mesolithic sites in western Britain, particularly those associated with peats in the intertidal zone, has produced evidence for charcoal spreads and the submerged forests at Goldcliff, Redwick and Westward Ho! in the Severn Estuary/Bristol Channel region include charred trees (Fig. 10.2a & b; Bell 2007). Significantly these charcoal spreads occur both



on sites with artefact spreads attesting to Mesolithic activity and in offsite contexts and there is evidence that not only trees but also reeds were burnt on several sites.

The charcoal evidence is even more frequent in coastal situations than in the uplands suggesting that Mesolithic communities may have been expanding the areas of woodland edge habitat, both in the uplands and at the coastal edge altitudinal limits of the hypothetical annual territories of these communities (Bell 2007). It is argued, however, that in a coastal situation abundant grazing would have been available for wild herbivores as a result of the natural disturbance factor of coastal change (eg, storms and floods) and that, if deliberate, burning is more likely to have been to encourage the valued plant resources of the woodland edge; hazelnuts, blackberries and raspberries were found charred in excavations at Goldcliff.

We must of course also question whether it is correct to assume, as British palaeo-environmentalists often have, that this burning is the result of deliberate human actions. Those working in continental Europe have tended to be more sceptical; there is much less evidence there, although some sites are now being recognised (eg, Bos & Urz 2003; Bos *et al.* 2005). Paradoxically in Denmark there is very little evidence of Mesolithic burning, but growing evidence of hazel coppice to produce straight even-aged wood for fish traps or wood suitable for basket traps (Christensen 1997). In North America fire histories are often interpreted in palaeoclimatic terms as drier periods of increased wildfire. Rackham (2003, 103) contends that it is practically impossible to burn the deciduous woodlands of Britain; however, the charcoal horizons exist and are sometimes widespread, so woodland must have been burnt whether by human agency or wildfire. Further research is needed to clarify the relative significance of these factors.

Various disturbance factors contributed to the patch dynamic of woodland and, at least in the British Isles, fire appears to have been a significant factor. Whilst the greater part of the landscape remained generally wooded, patches are likely to have persisted in particular places and to have been maintained by grazing animals and human agency. Routes of animal movement are likely to have been more open and in the American North West

chains of grassy clearings created by burning marked major routeways (Leopold & Boyd 1999). Where these were constrained by topography, or where they linked areas of key resource abundance, they may have persisted over extended periods. Thus openings in woodland created by one cultural group will sometimes have attracted settlement by other groups, notwithstanding the fact that they may have quite different economies and ecological requirements. Illustrations of this are coastal clearings created by aboriginal hunter-gatherer populations in both Tasmania (Kohen 1995) and in the American North West coast (Boyd 1999), which were then sites selected for settlement by Europeans, partly because their park-like qualities appealed to European aesthetic sensibilities. Where long persistent routeways converged the openings may also have attracted people over extended periods, thus possibly explaining the coincidence of Mesolithic and Neolithic activity below some Neolithic chambered tombs such as Hazleton (Saville 1990) and Gwernvale (Britnell & Savory 1984). In these ways the persistence of patches created in woodland can be seen as highly likely to contribute to the subsequent structuring of landscape, reflecting the ways it was used by successive generations, sometimes for very different purposes. This principle has been termed the structuration of landscape by antecedent conditions (Bell 2007, 341). Such a concept makes no assumptions about what caused the structure in the first place – storm, flood, human agency, beaver, etc. It suggests how activity may have become concentrated in such places which thereby acquired social significances: in the case of convergent routeways, marking places where communities met with all the opportunities that presented for exchange of information, materials, marriage partners, etc. Some such places would have been created by natural forms of disturbance, some the result of human agency, but many are likely to have arisen from a combination of factors.

### **New relations with the environment? Neolithic woodland living**

The period around 4000 BC is generally held to be the marker for the beginnings of the Neolithic in Britain. The beginning of the

4th millennium cal BC is a period that sees significant shifts in the character of settlement and landscape use across the British Isles. Changes in material culture, architecture, monumentality and perhaps worldview were accompanied by new relationships between people and the environment. In particular a number of lines of evidence suggest that the character and extent of the woodland that surrounded Mesolithic lives was being altered during the Neolithic. However, this is not to say that the relationship between people and woodland during this period did not continue to be an important element of everyday life or cognition. In contrast, it is perhaps possible to say that the relationship between people and woodland became even more entangled than previously.

In pollen studies the beginning of the 4th millennium BC is characterised by the occurrence and debate over the causes of a major decline in elm trees in Northwest Europe. This phenomenon was once assumed to be caused by human impact on vegetation in the early stages of transforming the forest into an agrarian landscape (Parker *et al.* 2002). However, this link between the elm decline and the onset of farming is now seen as much more problematic and a range of influences are now taken into account, with disease seen as the most likely culprit, albeit the spread of disease exacerbated by climate change and human activity that undoubtedly included some level of clearance for pastoral and arable agriculture (Parker *et al.* 2002, 26; Whitehouse & Smith 2010). More generally, the beginning of the 4th millennium BC is accompanied by increased evidence for impacts on the forest, activities that include occasional indicators of agricultural practices such as cereal type pollen, weeds associated with open areas and grazing indicators. This is a general trend however; in contrast, in some areas inputs of charcoal actually decreased at the onset of the Neolithic (Edwards 1998). Since the Vera model emerged, there have been moves to establish base line parameters from which to test a number of interpretations of Neolithic forest history. Mitchell's (2005) critique of the Vera model utilised a number of pollen sources from North-west Europe, to show that generally tree pollen percentages remained high prior to 3000 years ago, suggestive of the survival of closed canopy woodland conditions

in at least some localities well into the Bronze Age (Mitchell 2005, 172). Palaeoecologists are, however, slowly establishing that forest history was regionally variable and that there were major differences in the nature of the Neolithic Forest across the British Isles.

In Scotland the pollen record suggests that the dominant vegetation cover throughout the Neolithic was woodland (Edwards 2004; Tipping 1994). The composition of woodlands depended upon soil type, latitude and a range of other factors. In lowland eastern and southern Scotland the woodland at the beginnings of the Neolithic was oak dominated with hazel, elm, pine and birch making up the understorey. In northern Scotland pine forests dominated and in the island archipelagos of the north and west scrub-like birch and hazel woodlands occurred (Edwards & Whittington 1997). Nearly all of the Mainland Scottish pollen diagrams show only limited small-scale woodland clearance (Tipping 1994, 2007). However, it may be that the scale of Neolithic clearance and the problems identified above with pollen recruitment and estimating ratios of open to closed woodland have masked the identification of impacts on woodland during the Neolithic. A recent study utilising a localised soil pollen source in combination with simulation modelling has suggested that larger clearances undetectable in regional pollen sources existed (Tipping *et al.* 2009). The study was undertaken in association with the investigation of a major Earlier Neolithic timber building at Crathes, Aberdeenshire. The pollen analysis suggests that a large and unusual timber 'hall' existed in a clearing which could have been as much as 2 km in extent. This clearing appears to have been used for growing cereals, with patchy stands of hazel (perhaps hazel coppice) occurring amongst the cereal plots. While this study suggests the occurrence of large clearings, it is also important to note that the building itself was constructed using very substantial oak and other mature tree species, suggesting that dense old-growth woodland stands were close at hand (Murray *et al.* 2009). Moreover, regional pollen cores from the surrounding environment suggest that overall woodland cover was the dominant environment in the region, albeit with the caveat that clearances of the type that surrounded Crathes may be difficult to detect in the overall patterns (Tipping *et al.* 2009).



Concentrated work in England in recent years has suggested greater regional variability than has perhaps been suggested for Scotland, albeit the evidence is by nature more patchy than Scotland or Ireland, with fewer suitable sources for traditional pollen analysis. Where sources are present, the evidence, like Scotland, suggests variability depending upon region and topography (Hodgson & Brennand 2006). In areas such as Northern England, the pollen record, as in Scotland, suggests little change in overall woodland composition during the Neolithic, albeit with some evidence for heath expansion and agriculture in the uplands and some evidence for limited clearance in the lowlands (Beckensall *et al.* 2006, 23).

There were, however, some areas of England that perhaps witnessed greater landscape changes. Some of these differences can be traced back to earlier Holocene conditions. Certain areas of the southern English chalklands may have had more open forest conditions: the Upper Allen Valley, for example, an area that saw extensive Mesolithic and Neolithic activity, witnessed only limited woodland development in the Mesolithic with extensive open areas present throughout the Holocene (French *et al.* 2003, 2005; French 2009). This was not true of all areas of the chalk. In contrast, nearby Hambledon Hill seems to have been at least partly wooded into the period of Neolithic activity, in common with the contexts of many causewayed enclosures (Bell *et al.* 2008). The majority of the Upper Allen Valley area and some other areas of the chalklands such as the Stonehenge landscape consequently appear to have been largely open grassland by the later Neolithic, with limited areas of primary and secondary woodland present (Allen 1997; Allen & Gardiner 2009). In both of these landscapes the focus of the most extensive grasslands that developed in the Mesolithic and Neolithic were the areas in which the densest concentrations of Neolithic monuments came to be built (Allen & Gardiner 2009, 61).

In other areas of England, such as the East Midlands, where the combination of different palaeoenvironmental evidence has been easier to obtain, more nuanced pictures of woodland clearance, regeneration and landscape use can be outlined. Overall the regional pollen evidence for the East Midlands suggests only minor impacts in the

4th millennium BC (Clay 2001, 6; Campbell & Robinson 2007). However, pollen obtained from palaeochannels, a more localised source, can add important contrasting detail (Brown 2000; Clay 2001, 6). In the Raunds area of Northamptonshire, around the River Nene, we can see the differences in environment shown by different sources of palaeoenvironmental evidence. Charred remains of grass tubers from the use of turf in an Earlier Neolithic mound from West Cotton suggest that some areas of grassland occurred from the early stages of the Neolithic (Campbell & Robinson 2007, 18–36). Insect evidence from a long barrow at Raunds also suggests clearance of woodland prior to monument building, however the pollen evidence suggests that the monument itself was set against a background of woodland that differed little from later Mesolithic contexts (Campbell & Robinson 2007, 23). Monuments continued to be constructed in the area in the later Neolithic, and these may have been set in localised clearings, but the pollen evidence from the valley shows that woodland continued to dominate the wider landscape. Pollen analysis from a palaeochannel a short distance downstream from the monuments indicates alder growing around the river bank and significant proportions of oak, hazel and other tree types in the wider landscape during the later Neolithic (Campbell & Robinson 2007, 24–6). Insect evidence from the same palaeochannel also included major woodland indicators including rare and extinct species of woodland insects that suggest mature areas of woodland with little parallel today. Overall, the evidence from the Raunds area suggests significant landscape flux in an area that saw extensive human activity including the construction of monuments.

Increasingly additional lines of environmental evidence are impacting on our understanding of Neolithic woodlands. In the recent review of the fossil beetle evidence from southern Britain (Whitehouse & Smith 2010) the period 4000–2000 cal BC was found to be one of significant landscape complexity with an overall (but not unilinear) trend towards a more open landscape, albeit one where tree and wood decay beetle communities remained significant. The evidence Whitehouse and Smith found was suggestive of ‘a shifting mosaic landscape, in which tree clearance, regeneration and the activities of grazing animals were

important', a similar picture to that which is emerging in recent pollen work (2010, 549). The palaeoentomological record also suggests some re-afforestation after the initial phases of the Neolithic, with only limited evidence of clearance and grazing during the middle Neolithic 3500–2500 cal BC. Whitehouse and Smith's recent work accords well with other studies of the insect evidence, which had suggested that the Neolithic woodland generally was a mosaic of small-scale clearings, abandoned clearings, stands of secondary growth woodland and some undisturbed primary woodland (Robinson 2000). Thus, while Neolithic communities were making an impact on the overall woodland cover, the presence of wildwood insect fauna and species of woodland insects that are now extinct, or occur only rarely today, suggests that the character of the woodland retained elements very different to any woodland environment that exists in the present landscape in north-west Europe (Robinson 2000).

Overall the evidence from across Britain and north-west Europe more generally suggests that woodland remained an important element of many landscapes during the Neolithic. A common pattern is for the slighter clearance impacts evident in the Neolithic being superseded by larger, landscape scale deforestation events in the Bronze Age (eg, Berglund 1988, 250; Brown 1997, 134; Sjögren 2006, 116; Tipping 1994). The picture overall is of a mosaic of vegetation types occurring during the Neolithic, with a general, but by no means consistent trend for more open landscapes in the first half of the 4th millennium followed by less clear-cut indicators of forest impact during the period c. 3500–2500 cal BC, with a renewed phase of clearance towards the middle or end of the 2nd millennium BC (Whitehouse & Smith 2010, 549). Certain landscapes appear to have been more open, in particular some of the better known chalkland landscapes in Wessex and Cranborne Chase and this can perhaps be traced back to important differences in the character and composition of the earlier, Mesolithic woodland, which has significant implications for the later history of these landscapes (Allen & Gardiner 2009; French 2009).

In all of these studies it is clear that there are divergent local and regional patterns. No

single source can reveal the full picture; more integrated studies and in a greater number and spatial coverage are needed to tease out the wider patterns. Certainly, we shouldn't assume that the pattern throughout each region through time was characterised by constantly decreasing woodland. The evidence from the Raunds landscape, for example, suggests scrub woodland regenerated over at least some of the monumental foci of the valley (Campbell & Robinson 2007, 27). Even on the chalklands there is also evidence that some monuments saw localised regeneration (Entwistle & Bowden 1991; Allen 1997). As Whitehouse and Smith note, it is clear that the Neolithic woodland was a constantly evolving and changing ecosystem (2010, 551). During the Neolithic the forest remained a much greater influence on everyday life than in the majority of landscapes of north-west Europe in more recent times (Peterken 1996; Svenning 2002).

### **Woodland: its perception and use in prehistory – conclusions**

We can see how our understandings of woodland dynamics in the Mesolithic and Neolithic are slowly changing through new palaeoenvironmental studies that are increasingly incorporating a wide range of evidence from pollen to insects to proxy data from excavated prehistoric sites. What remains to be done is to more carefully consider the ways in which people, animals, plants and material culture came together through time to create the Mesolithic and Neolithic environments that we study through the trowel and the microscope. While post-processual and other interpretive traditions have begun to consider the role of the landscape in past perception and lifeways (eg, Richards 1993; Tilley 1994), what has been less successful is an incorporation of our increased understanding of changing woodland environments into our interpretive narratives of the Mesolithic and Neolithic. This will require detailed and integrated local studies alongside the successful fleshing out of national (and international) trends and patterns in environmental change and its relationship to past communities. One of the recent challenges to the traditional picture of earlier Holocene woodlands (Vera 2000) has now in turn been questioned, but the Vera debate shows the potential fragility of accepted models and

our need to constantly test assumptions and models of woodland formation and demise using techniques at the interface between ecology and archaeology.

Our picture(s) of Mesolithic woodlands and environmental relationships is slowly altering earlier important, but broader-brush, interpretations that postulated a link between management of woodland and the Mesolithic economy (eg, Mellars 1976). A tradition of altering the woodland to promote particular plant and animal communities can now be suggested to stretch back to the earlier Mesolithic, and can be identified as a phenomenon that was not necessarily constant nor subject to evolutionary patterns of greater complexity through time (Bell *et al.* 2009). It will be increasingly important in future years to examine the wider patterns and trends identified at a more localised, human scale. Here the identification of burning in association with submerged forest at locations such as the Severn Estuary, for example, provides excellent opportunities to examine in detail the ways in which particular hunter-gatherer groups lived in and understood their landscapes and environments (Bell 2007). As is known in places such as the north-west coast of Canada (eg, Oliver 2010), the forms of environmental 'management' that hunter-gatherers engaged with may be ones that are difficult to recognise with Western eyes, but important nonetheless. Indeed the practices of burning reeds and perhaps woodland, promoting the growth of particular plant communities or the congregation of particular animal communities, may have continued into the Neolithic, or perhaps even more fundamentally, conceptually allowed the Neolithic to occur.

In the Neolithic new plants, animals and human communities developed new relationships with the woodland environment. The overall evidence from the Neolithic of Britain and elsewhere in north-west Europe suggests landscapes in flux, with woodland cover receding and regenerating over time with different temporal rhythms in different regions and in different valleys, aspects that would have given certain 'rhythms' to Neolithic life. The pollen and insect evidence suggests clearance of woodland clearly became more of a routine, and in some areas spatially extensive, part of life in the period 4000–2000 cal BC

(Whitehouse & Smith 2010). It may have been that management of woodland also became more important in this period too, with an expansion in the coppicing of particular areas of forest and/or particular kinds of tree (cf. Andersen 1992). In the Neolithic, the stone axe has been seen as the 'smoking gun' of environmental change (Kristiansen 1993). We certainly need to understand in more detail the ways in which woodland was cleared and altered in this period, for this is not just important for understanding technological or environmental change, but essential for understanding Neolithic worldview and cognition (Noble forthcoming). As in the Mesolithic, fire in addition to clearance by axe clearly played some role in altering the land, with increasing evidence of the burning out of tree boles in a number of landscapes (eg, Evans *et al.* 1999; Campbell & Robinson 2007). In the Scandinavian tradition burning has long been thought to have played a role in Neolithic and later landscape change (Iversen 1967; Andersen 1992; Robinson 2000), but in Britain this has been refuted or downplayed (eg, Rowley-Conwy 1982; Rackham 2003). In Scandinavian ethnographic contexts, burning has been seen as a practice carried out after primary felling by axe, and this is a likely form of clearance for many Neolithic landscapes. Whatever the case, engagement with wood and woodland environments was routine in many Neolithic lives and landscapes and this is something that has not been foregrounded in many accounts (with some exceptions, eg, Edmonds 1999; Evans *et al.* 1999; Evans & Hodder 2006).

As well as considering places that continued to have significant woodland cover, we must also consider the significance of places that did witness larger scale clearance or were more open throughout the Holocene. It is probable that the large-scale monumental complexes such as those found on Cranborne Chase in England, where there was less woodland development and greater open extents, would have gained part of their significance from the fact that the environment around the monuments was different from the character of many landscapes elsewhere (Allen & Gardiner 2009, 61; French *et al.* 2003; Tilley 2007). Similarly, open areas along corridors of animal or human movement, or openings where they converged may have achieved social significance later embellished by monuments

such as chambered tombs. Much of the evidence for clearance in these landscapes suggests pastoral activity and the more open conditions present in the Mesolithic would certainly have encouraged grazing animals (Wilkinson & Straker 2008, 110; Robinson 2000). These may well have been areas which were significant as communal grazing areas with a great tradition of human use (Lelong & Pollard 1998, 49). Through greater levels of openness these locations would have taken on different sensory qualities and would have become more suited to particular agricultural lifeways and tasks. These were also landscapes that became the great ceremonial centres of their region and time. However, even in landscapes where many monuments were built, woodland could remain an important part of landscape cover, inhabitation and perception (Campbell & Robinson 2007).

We should also consider the impact that woodland would have had on prehistoric beliefs and worldviews (Parker Pearson & Ramilisonina 1998; Tilley 2007). Clearly, the surge in the numbers and occurrence of stone axes in the Neolithic was related to the greater need for clearance for grazing and cultivation. However, axes were also deposited in votive contexts, some were unused and perhaps even wrapped and painted for ceremonial use (cf. Wentink 2008), and where representational art occurred in north-west Europe axes were amongst the most common motif (eg, Whittle 2000). **Clearly the axe was an important element of Neolithic worldview as well as being an important tool.** From the earliest Neolithic the axe was of central symbolic importance in Neolithic society, a 'master symbol ... [that] came to stand for the social totality and its norms' (Thomas & Tilley 1993, 235). The power and symbolic potential of the axe, however, **undoubtedly derived from the axe's effectiveness in allowing Neolithic lifestyles to be undertaken, lifestyles that depended upon new ways of understanding and interacting with the environment, and the importance of the stone axe would have related to its ability to transform the environment and alter the balance in the relationship between people and place.**

The symbolism of wood in Neolithic architecture is also an increasingly recognised factor in Neolithic monumentality and worldview (eg, Evans *et al.* 1999; Evans

& Hodder 2006; Noble 2006, chapter 4; forthcoming). While Bradley's reference to Mesolithic people having important relationships with hazelnuts (Bradley 1984) was tongue in cheek, it is the case that we have to explore in more detail the ways in which the environment impacted on cosmology, and in the case of the Neolithic in particular, monumentality and the use of particular materials in building and craft. While Mesolithic people undoubtedly had an intimate relationship with the environment this was also the case in the Neolithic, albeit that the particular relations between people and their environments may have been conceptualised differently. With the onset of food production the need to give back to the environment through votive offering and reciprocal action may have been exaggerated due to the greater interventions and reliance on landscape manipulation and clearance (cf. Bird-David 1999). This should be a major research avenue for future exploration. Exploring the development of woodland perception and cosmologies through time will also be important, as the inverted tree at the Early Bronze Age site at Seahenge, Norfolk, shows (Brennand & Taylor 2003).

In considering what woodland meant to people and how it became a medium in their lifestyle and world views, the challenge is effectively to integrate evidence from a range of sources and perspectives, both scientific and social. The environmental evidence is increasingly abundant and the capacity to compare sources of evidence helps to address some of the issues of spatial and temporal contrasts noted. Increasing densities of sites means that in some areas regional, and even local, contrasts in the extent and character of woodland are emerging. Many contrasts are partly the product of geological, pedological, hydrological, or topographic factors. It is, however, increasingly evident that human agency and even probably deliberate management from hunter-gather times was an important factor in clearing and opening woodland. Social perspectives help us to think about how people perceived trees and how a range of disturbance factors, including people, would have affected the composition of woods and the habitual routes by which they were encountered. Habitual actions created some openings which were evidently of long



duration, attracting Mesolithic activity and eventually becoming the sites of Neolithic monuments. The story is no longer, as it once appeared, that of humanity's unrelenting struggle against the dark forces of the wildwood but about how trees were perceived, manipulated and managed as an integral part of the context of hunter-gatherer and early farming lifeways.

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# Not Out of the Woods Yet: some reflections on Neolithic ecological relationships with woodland

*Michael J. Allen and Julie Gardiner*

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*This paper explores the notion that, during the Neolithic, woodlands were utilised places, not areas of irrelevance, exclusion, or darkness and void of social actions. Varying trajectories of settlement pattern, woodland exploitation, and monument construction are discussed. The dating, distribution, and nature of flint mines and monuments, the presence and contents of pits, the location and composition of flint assemblages, and evidence for major economic and environmental change are considered in terms of their physical and symbolic relationship with woodlands. Rather than being something incidental that needed to be removed, woodland is here considered to have constituted a deliberately shared space and the focus of monumentality: the crossing of pathways, the place where communities met and interacted and ceremonies took place – the experience of woodland continued to be a fundamental aspect of life throughout the Neolithic.*

This paper sets out what we consider to be obvious questions that do not seem to have been addressed by others and to which we will attempt to outline some possible answers. It springs from the encouragement of our mutual PhD examiner (Professor Clive Gamble) to pool the ‘results’ of our respective theses and make some broader comments on the social history and land-use development of the Neolithic and Early Bronze Age chalklands of southern England. Our original and independent forays into this region were aimed at questioning some long-accepted, even entrenched, views about Neolithic landscapes, society, and settlement – from the point of view of the largely

untapped wealth of existing lithic evidence on the one hand (Gardiner 1988), and from newly acquired environmental datasets on the other (Allen 1994). Many of the questions addressed in this paper follow from conversations held over our own breakfast table or originated over coffee with Richard Bradley, and it sets out a few of the conundrums that have been exercising us recently.

Richard encourages debate, the challenging of accepted doctrine, lateral thinking, questioning, and the setting out of new ideas for others to challenge. He has long made it clear that, in his opinion, a good argument towards a potentially controversial resolution



is much more satisfactory than a 'definitive' statement based on poorly defined criteria or assumptions.

Archaeologists make many assumptions, which often become translated into 'facts' and are accepted as received knowledge in subsequent research. But sometimes our assumptions can prevent us from thinking about the 'bigger picture' or lead us into ignoring awkward contradictions and lacunae in the data on which we attempt to reconstruct past lifeways and the landscapes inhabited, and impacted upon, by prehistoric communities. In particular, we have often been very bad at integrating 'difficult' environmental data.

Our researches have been aimed at attempting to elucidate the fundamental relationship between the physical and ecological landscape inherited by Neolithic communities and the effects on it of several thousand years of subsequent settlement, subsistence, and deliberate modification by a population in the transition from an itinerant hunting and gathering based economy to a settled farming one. Our interests are, unashamedly, in the mundane and the everyday: on the building blocks of Neolithic society rather than the splendours of its monumental legacy. In this paper our focus is on the southern English chalklands. Specifically we look at Wessex (including Cranborne Chase) and Sussex from a non-monumental and non-funerary perspective in the Neolithic to Chalcolithic periods. These are geologically, topographically, and ecologically comparable areas which are demonstrably overflowing with archaeological remains and have been equally subjected to centuries of archaeological investigation at every possible level (eg, Pitt Rivers 1887–98; Barrett *et al.* 1991; Rudling 2003; Allen 1994; Gardiner 1988). Archaeologists know parts of them very well indeed, and in great detail, but our interpretations of the wider landscape may be hampered by a long-standing emphasis on the investigation of focal monuments. By their very nature these are the 'unusual' in a landscape where the 'usual' is less visible and may be only more subtly revealed.

Here we pose a series of questions which explore varied trajectories of settlement pattern, woodland exploitation, and monument construction, and outline ways in which, taken together, the material and environmental evidence may point towards a rather different

Neolithic to the one we think we know. We address perceptions of Neolithic activities in woodland. In asking these questions we are well aware that we do not, as yet, know the answers, but we hope that they will appeal to the *agent provocateur* in Richard and that the articulation of the various concepts and mis-assumptions addressed will serve a useful purpose in its own right.

## Living in woodlands

The Early Neolithic landscape has been seen as a carpet of woodland – one in which a Neolithic community roamed, searching for a suitable hilltop on which to cut down a few trees and commence building a long barrow or a series of interrupted concentric ditches. From their lofty hilltop they could see across the woods into valleys and to other hilltops where wisps of smoke curled from clearings in which similar activities were being played out.

Archaeologically we engage readily with the evidence for those constructions and the activities associated with each – burial, feasting, communing, trading – and suggest the presence of an organised society engaged in complex social relations accompanied by the production, use, and discard of artefacts. We analyse distributions of those artefacts and identify discrete patterning, structured deposition, and randomly discarded waste. We also engage with the osteological remains and examine age, stature, health, wealth, diet, and geographical origin, even individual geographical life pathways, such as that of Cranborne lady (Montgomery *et al.* 2000). We acknowledge the presence, indeed the importance, of woodland, but rarely attempt to engage with it at the same level – rarely straying much beyond discussion of its possible distribution and the rate and extent of its disappearance through clearance for agriculture. Like our medieval ancestors we seem, however unconsciously, to view woodlands as being dark, dangerous, liminal and imbued with menace. But woodlands need not be places of foreboding, danger, or mystery. Even today they are among the most diverse and rich of ecosystems (Rackham 2003). For thousands of years people had lived in the woods, being Mesolithic, relying on a wide range of woodland resources: timber for fires, building, and artefacts; leaves and bark for tinder, wrappings, cooking, and ropes/

twine; and food, tallow, pelts, and clothing in the form of nuts, berries, fruits, and wildlife, from aurochs and wild boar to birds, eggs, and small rodents.

If woodlands were such great reservoirs of vital resources why, in the Neolithic, do we consider them to be arenas that were only plundered for materials that could be removed to the safety of settlements and campfires in the open? Had they simply completely run out of hazelnuts? It seems an extraordinary leap of faith to assume that the woodlands were abandoned as soon as there was a clearing large enough to support a small flock of sheep and a few strands of deliberately planted grasses. There is a tendency to believe that communities wished to get rid of woodland: reasons given are for building monuments, creating graze for animal husbandry, and the onset of farming and tillage. While Early Neolithic communities were experimenting with farming, but were not yet fully fledged farmers, they surely would have spent much time in woodland – hunting and gathering but also setting fires, acquiring flint, and performing activities we might otherwise naively consider to be restricted to open areas (see Fig. 11.4).

Woodlands are characterised by a range and diversity of micro-habitats and resources. They are not uniform plantations with constant levels of light, stretching endlessly over hill and down dale. Woodlands embrace topography, envelope hilltops, contain streams and pools. Animals create criss-crossing pathways linking patches of densely growing brambles laden with berries with stands of leafy shrubs heavy with nuts and fruits, open glades with lush grass and green herbaceous vegetation and wetter zones with streams, boggy bits, and dark banks of mosses and ferns (Rackham 2003). Variety also exists in the age and structure of woodland on both local and sub-regional scales – young saplings stand alongside mature trees and adjacent to dying and dead ones in a carpet of understory vegetation. Some dead trees are represented by jagged stumps while others lie fallen with large aerial root plates creating gaping holes and leaving scars in the woodland floor.

Why is it important to highlight this? We know what woodlands are like, we know they existed ... but do we ever really put Neolithic communities back into them? The activities that we might expect to have witnessed

include the gathering of fruits and berries, the collecting, chopping, and cutting of wood for fuel and to create or enlarge openings in the canopy and woodland floor. Flint axes, knives, and serrated blades would be used and lost, but also sharpened and modified and organic tool components of wood, bark, bone, sinew, and antler made, broken, and discarded. Flint may have been scavenged from tree throw hollows which, in turn, also provided ideal sheltered locations to set fire, camp, rest, and knap. Animals large and small could be tracked and hunted with spear and arrow, and butchered and dismembered with the axes, knives, and scrapers that we consider characteristic of Early Neolithic flint assemblages. These tools and weapons too could be lost, reconditioned, refashioned, or manufactured in the woodland during the course of a hunting expedition or made to order while butchering a carcass.

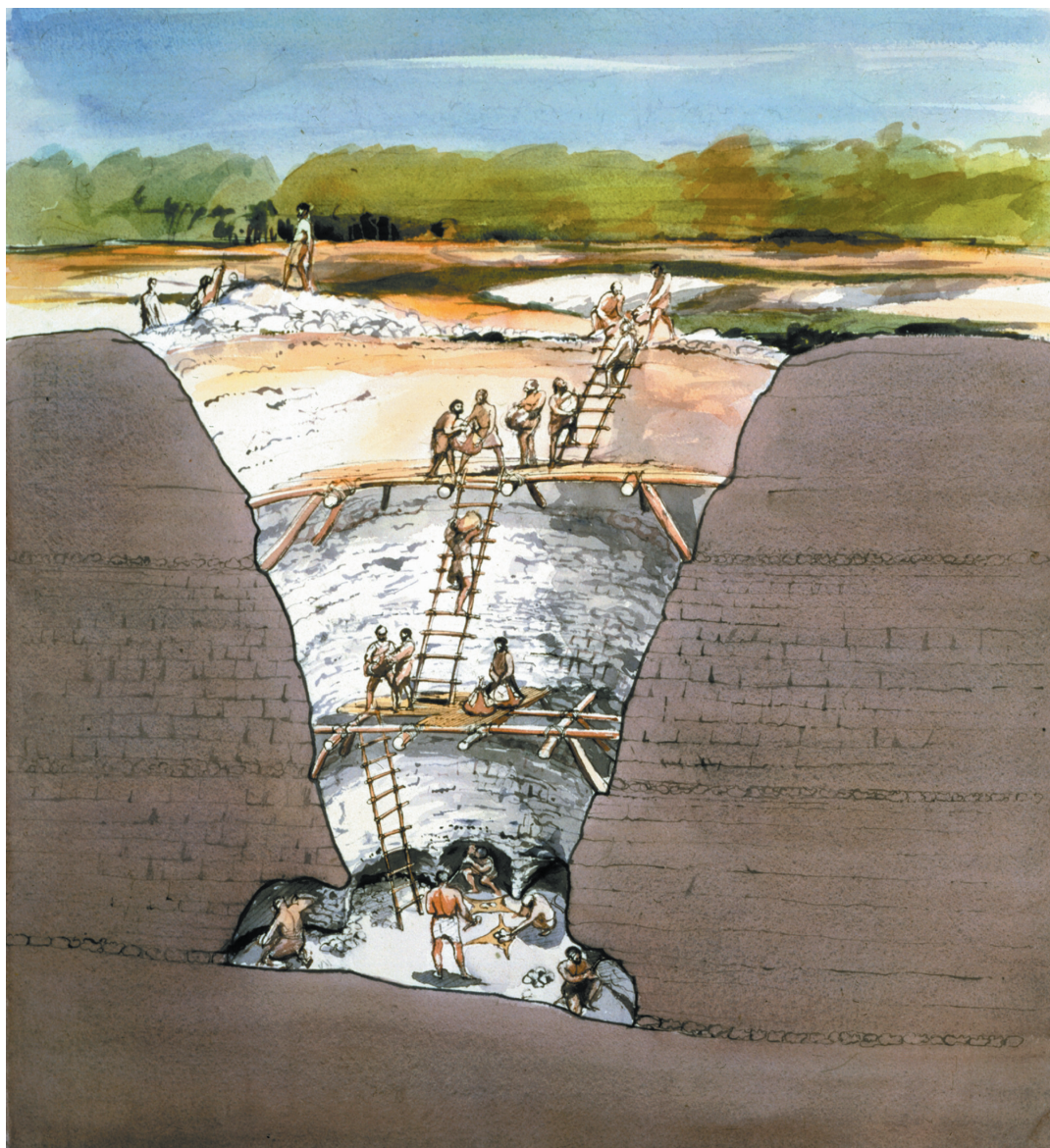
Moreover, these actions were not simply vital subsistence tasks but were social activities involving young and old, mothers and daughters, skilled mentors and novice apprentices, all of whom were also engaged in teaching, learning, monitoring resources, creating and maintaining social bonds, establishing individual place in the family and community, and reinforcing knowledge – including sacred knowledge – and mental mapping of the home range. Without wishing to stray too far in the direction of phenomenology, the *experience* of woodland seems to us to have continued to be a fundamental aspect of life. The activities served to imbue locales within them with a sense of place and a place of meaning.

What clues do the combined archaeological and palaeo-environmental records provide to support our assertion? There are various classes of material and strands of evidence that we can draw on. These include the dating, distribution, and nature of flint mines and monuments, the presence and contents of pits, the location and composition of flint assemblages, and evidence for major economic and environmental change. Archaeologists and environmental archaeologists alike use monuments as proxy evidence for woodland clearance (eg, Allen *et al.* 1990, fig. 155; Allen 1997a, pls 1–5), but also, and perhaps erroneously, view artefact scatters in the same way.

There has long been an assumption that flint mining (Fig. 11.1) took place in the summer months on open downland (eg, Gardiner 1990;



Figure 11.1:  
Reconstruction of flint  
mine at Grimes Graves,  
Norfolk. Although these  
are later than the Sussex  
mines the extraction  
method would be the same  
– note the woodland in  
the background! (Image  
Terry Ball English  
Heritage Graphics Team:  
Copyright © English  
Heritage Photo Library)



Barber *et al.* 1999; Topping 2011) either tied into a simple annual cycle of seasonal stock movement (Bradley 2007; Gardiner 1988) or as a more symbolically charged operation involving migrant miners and complex social narratives (Topping 2011). Such assumptions arise essentially from the physical separation of the mine complexes from other manifestations of Early Neolithic communal activity (long barrows and causewayed enclosures), the lack of evidence for settlement in the mining areas, and our need to find a reason to populate this part of the downland in order that the discovery of seam flint and the mining of it might occur at all. Today, the main complexes are situated on open windswept hills such as

Cissbury, Blackpatch, and Harrow Hill and Barber *et al.* (1999) have remarked on the inter-visibility of sites. But what evidence do we have that this area was open when the mines were in operation? Why can't you mine flint in woodland? Good environmental evidence from the flint mines does not exist; many were excavated prior to the advent of scientific archaeology, though hand collected snails were examined from a number of the Sussex mine excavations by Kennard and Woodward. Even though these were mainly hand-collected specimens and are not representative of the overall fauna, some interesting points are noteworthy. One of the rare snails of ancient woodland which is typical of beech woods

today, the cheese snail (*Helicodonta obvolvata*), has been recorded in a number of flint mines including Easton Down, Wiltshire and Stoke Down, Sussex (Evans 1972, 169): these are unlikely to survive in long cleared woodland and open downland. Further, the lists of snails from the shafts at Harrow Hill (Kennard 1937; Kennard & Woodward 1926) show more shade-loving species at depth, and these are not wholly species that are likely to have been dwelling in the flint mine micro-environments. These tentative glimpses suggest that the flint mines were not set in wholly open grassland landscapes, and that woodland existed. Perhaps, therefore, these were mines in woodland clearings! In Poland there is growing evidence that some of the Neolithic mine sites there were situated in woodland. Charcoal from Saspow near Kracow in the Ojcow Jura indicates that the site was covered by mixed Atlantic forest with a high frequency of hazel, with clearings made for the mines to be dug. Charcoal samples from the shafts of mines of 'chocolate' flint in the Holy Cross Mountains in central Poland included mature pine and oak with some hazel, ash, hornbeam, and birch (J. Lech, pers. comm.).

Pits are an almost ubiquitous feature of Neolithic sites and we will not rehearse their many manifestations and contents here (see for instance Garrow 2006; and papers in Lamdin Whymark & Thomas 2012 for some recent discussions). Whether or not they are immediately associated with other physical features, and however we choose to interpret their contents, we tend to assume that most pits are in some way associated with, and indicative of, settlement. In the later Neolithic this seems a reasonable assumption as they often occur with sizeable flint assemblages and other spreads of materials and may be found in close proximity to major monuments. Pits in the Early Neolithic are less easily interpreted and generally lack the repeated combinations of objects and materials of many later examples. But are they necessarily features of open land? Early Neolithic pits on the chalklands are relatively scarce, and those with good environmental evidence almost non-existent. However, two pits, from Bishopstone, Sussex (pits 570 and 357; ironically the latter excavated by one of the authors as a schoolboy) produced mollusc assemblages not typical of open downland, but of shrubby, shady conditions

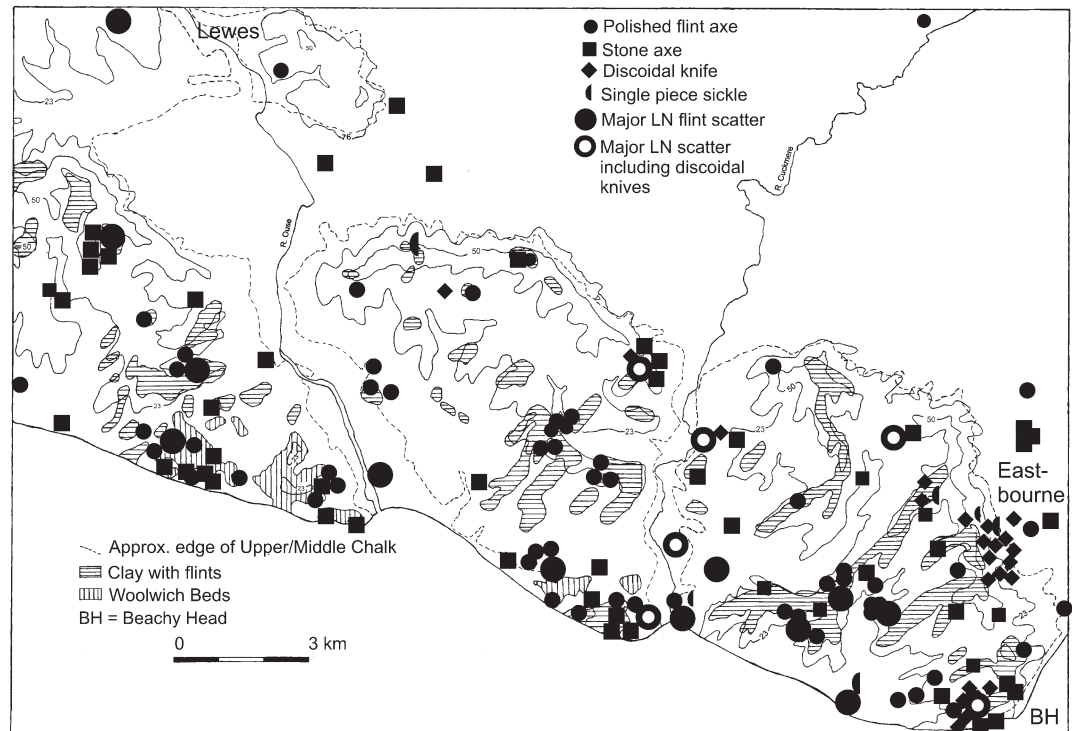
– perhaps open woodland (O'Connor, in Bell 1977, 267–73). Even some Late Neolithic pits have woodland associations; for instance pit F1017 at Easton Lane in Hampshire seems to have been created in woodland that soon became locally cleared (Allen 1989). Which came first: the pit or the necessity to increase clearance?

Extensive flint scatters occur on the southern chalk, such as those recovered through fieldwalking in the Stonehenge environs by Julian Richards (eg, Cleal 1990, fig. 154) and on Cranborne Chase (French *et al.* 2003; 2007), and those collected by less systematic means across many parts of the Downs (Gardiner 1984; 1990; 2008). The vast quantities, composition, and extent of these scatters has led us, perhaps subconsciously, to equate them with open landscapes, partly because they tend to be portrayed as dots (Fig. 11.2) or shadings (Cleal 1990, fig. 154; Allen 1997a, pls 3 & 5) on otherwise clear or 'open' maps, and partly because we assume that they relate to settled farming and domestic activity supported by local procurement and working of raw materials. However, given the complete lack of close chronological resolution, could we not equally view these distributions as part of the *process* of clearance rather than the end result and, in some areas at least, to be the product of a wooded landscape?

Flint scatters *per se*, have no physical context from which direct palaeo-environmental data can be gained – they usually reside in the modern ploughsoil. We cannot, therefore, provide site- or time-specific environmental data, and are forced to address the nature of associated land-use via more general environmental sequences. The scatters however, unlike monuments, are extensive (eg, Fig. 11.2) and the likelihood of detecting land-use over these areas should be better. Environmental evidence from many causewayed enclosures indicates that they were built in recent clearings just accommodating the monument. Even the molluscan analysis of very open conditions reported from a ditch tangential to the Whitehawk causewayed enclosure (Thomas, in Russell & Rudling 1996) is now shown to be later prehistoric, and not Neolithic (Oswald *et al.* 2001, 142–3; Healy *et al.* 2011, 226). For the Eastbourne and Beachy Head area (see Fig. 11.2 for instance), we struggle to find any environmental evidence. Subsoil hollows from Kiln Combe, stratified



Figure 11.2: Late Neolithic–Early Bronze Age flint scatters of the Beachy Head Group, Eastbourne, East Sussex



under pre-Beaker hillwash, indicate closed canopy to mixed and lighter woodland (Bell 1983). For the Lewes area (Allen 1995) colluvial sequences are just as local and tentative, indicating stands of woodland in the valleys at least. Pollen from the Ouse valley, referencing the adjacent chalk (eg, Thorley 1981; Waller & Hamilton 2000), may indicate a mosaic of woodlands on the chalk, but the pollen taphonomy is too complex to be sure. Closed canopy woodland could have extended down the steeper slopes overlooking the Ouse valley and mask pollen from the higher downlands. Why can these large Neolithic artefact populations (Fig. 11.2; Gardiner 2008, figs 20–5) not be evidence of activities within woodland? Although they are extensive, they do not have to equate with open landscape arenas.

In Wessex, however, as we return to below, large artefact distributions around Maiden Castle (Woodward & Bellamy, in Sharples 1991), on Cranborne Chase (Barrett *et al.* 1991), and in the Stonehenge area (Richards 1990), do seem to be sited within pre-existing, long-standing open countryside from the Mesolithic to earlier Neolithic periods (eg, Dorchester: Allen 1997b; Cranborne, French *et al.* 2007; Stonehenge, Allen 1997a), as we

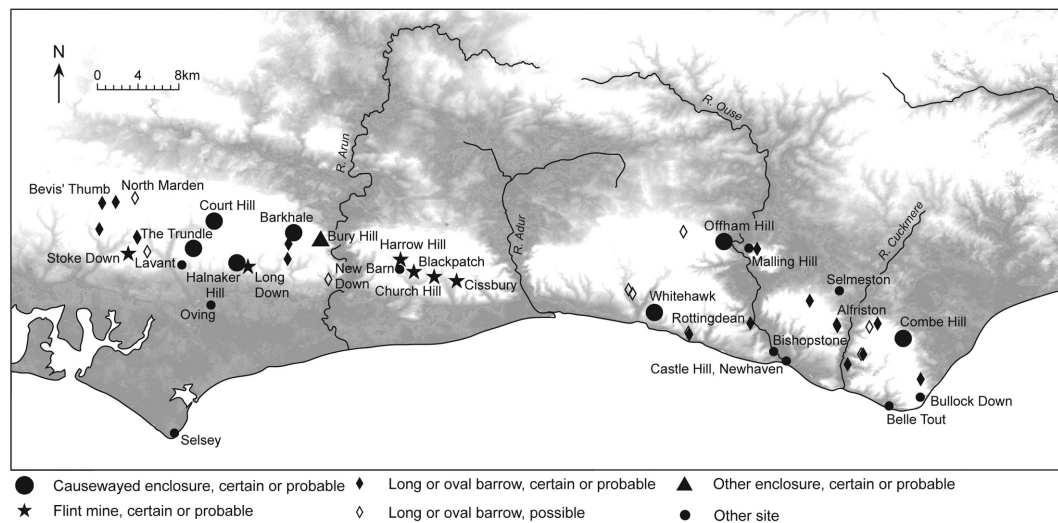
have discussed previously (Allen & Gardiner 2009).

## Early Neolithic landscape, society and monumentality

### *Where are the settlements?*

All across Southern England, and well beyond, what we traditionally call the ‘Early Neolithic’ (in cultural terms) displays an underlying unity of expression in terms of the technological attributes and diagnostic components of lithic assemblages and pottery, and in funerary and other monuments. There is certainly regional variation and there is clearly movement, and, at the very least, stochastic contact and exchange of objects and ideas between communities across relatively large geographical areas. But these regionalities are subsumed by an overriding coherence in material culture, social organisation, and ideology. This is most manifest in the synchronous appearance of, first, a specific form of burial monument and, just a few generations later, a series of morphologically closely related monumental enclosures up and down and all across the country (Bayliss & Whittle 2007; Whittle *et al.* 2011). Their distribution is widespread but not evenly so; each type may occur isolated, in pairs

Figure 11.3: Causewayed enclosures, long barrows and flint mines in Sussex (from Whittle *et al.* 2011, fig. 5.1, with permission)



or clusters, and both may be present in some areas, or only one. There are also areas in which neither has been found. They occur all across the southern chalk but there are clear regional patterns in their distributions. Within Wessex, Wiltshire has both, Dorset has mostly long barrows and Hampshire only long barrows. Sussex has both (Fig. 11.3).

Decades of research and detailed investigation of many examples of both long barrows and causewayed enclosures has emphasised the underlying logic of these structures, the material culture associated with them, and the communities who created them, while also demonstrating variability and individuality in the manner in which they were built and put to use and in the internal chronology of activities taking place in and around them. Such matters of detail are not our concern here because it seems to us that the elephant that remains in the room is the fundamental question of why this fragmented pattern persists in the archaeological record. While it is always possible that other examples await discovery, it is notable that newly recognised monuments, such as the long barrows at Damerham on Cranborne Chase (Wickstead *et al.* 2009), at Wiggold in the Cotswolds (Allen pers. obs.; T. Darvill pers. comm.) and the postulated example near Avebury (M. Barber pers. comm.), serve merely to reinforce the known distributions at a regional level rather than to fill in the significant gaps.

Those gaps are partly filled by the presence of surface collected flint assemblages. Spatial

analysis of the distribution of Early Neolithic flintwork (Gardiner 1984; 1988) indicates a close association between the location of flint scatters on upper hillslopes overlooking major valleys that probably contained running watercourses at the time, and the distribution of superficial deposits such as clay-with-flints and Woolwich beds, whose soils are likely to have supported significantly, and recognisably, different vegetation to those developed on 'bare' chalk. While a proportion of these scatters do occur in the same areas as long barrows, the location of causewayed enclosures is essentially peripheral to these distributions, lending weight to the argument that they tended to lie towards the edges of communal territories (eg, Bradley 2007, 69–87; Evans *et al.* 1988).

But the occurrence of Early Neolithic flint scatters is also discontinuous, as it is elsewhere, and this does not correlate with the distribution of flint collectors. So how widely was the chalkland settled in the Early Neolithic? Perhaps we should not conclude the these flint scatters equate to open downland, *ipso facto*, but could be activities taking place *within* woodland and *within* glades in woodland; that certainly requires more detailed and challenging palaeo-environmental investigation.

#### ***Did Early Neolithic flint mining take place in woodland?***

The recent massive redating programme for Early Neolithic monuments (Bayliss & Whittle 2007; Whittle *et al.* 2011) frees us from the need to tie in the flint mines closely with the patterns

and level of social development that produced the long barrows and enclosures, because the modelling of radiocarbon dates shows clearly that the onset of mining preceded them by several centuries. The monuments themselves conform with the general pattern of dating demonstrated elsewhere in southern England (*ibid.*, chap. 5; Bayliss & Whittle 2007). This allows us to reconsider the context of the Sussex flint mines. Environmental evidence, where recovered, indicates that both long barrows and enclosures were constructed in recently opened and/or short-lived woodland clearings (eg, Sussex, Thomas 1982; and Windmill Hill, Fishpool 1999, 127–38). If flint mining began in central Sussex perhaps 10 generations or so before the first long barrow was built what is the likelihood that this area was already open grassland (see Allen & Gardiner 2009)?

The discovery of seam flint can only have occurred where nodules were exposed at the surface in sufficient quantity to have encouraged further exploration of the source. Barber *et al.* (1999, 31) comment on several possible mechanisms for the exposure of flint including ‘soil erosion promoted by tree fall, human clearance, or some form of cultivation’ and consider that the accumulation of nodules in valley bottoms weathered out from *de-forested* slopes might have been an important stimulus. We suggest that Early Neolithic flint mining could have commenced in woodland and that the first indications of the presence of good quality flint sources are likely to have come from what Evans *et al.* (1999) term the ‘kick-up hollows’ of fallen trees.

Topping (2011) considers the likelihood of mining taking place in the summer months on health and safety grounds, not least because of the dangers of slippery chalk surfaces, and flooding in the colder and wetter parts of the year, and notes the lack of evidence for either settlement structures or protective covers over the mineshafts. While we do not dispute the probably seasonal nature of procurement, slippery surfaces and flash flooding could pose threats at any time of year following heavy rain, but such problems would be lessened under tree cover and deep leaf litter. We suggest that the lack of structural elements could be easily explained by the ease of constructing simple shelters from live young saplings and brushwood covered with animal skins.

Woodland resources, in themselves, would also have been needed for mining; timber for scaffolding, props and supports, vines such as ivy and clematis for use as ropes, etc. Tree-throw hollows have long been recognised as ‘reservoirs’ of Mesolithic and Early Neolithic flintwork, leading several authors (eg, Evans *et al.* 1999; Edmonds 1999) to consider their use as places of shelter and temporary occupation (see above).

If we were to accept the possibility of mining in woodlands for Early Neolithic Sussex then perhaps we can go even further than Topping, in his (2011) discussion of the possible ritualisation of flint mining, by highlighting the inherent symbolism of producing from the ancient forests the very means of cutting them down. The idea of ancestral mine sites, hidden deep in the forest, being regarded as special places from which came forth significant objects of great practical and symbolic value, is an attractive one. Bradley (2000, 90) commenting that the Sussex mines are offset from the distribution of monuments notes that ‘they also avoid the distribution of settlement sites, as evidenced by dated flint scatters’. Perhaps we can turn this statement on its head?

### *Of causewayed enclosures ...*

We think of causewayed enclosures as being placed in clearings newly created in the woodland, providing the genesis for widespread deforestation. But this is *our* perception – such constructions were not randomly placed, however we look at them. They were deliberately placed *in* the woods. So, rather than being something incidental that needed to be removed, woodland was actually a shared space and the focus of monumentality: the crossing of pathways, the place where communities met and interacted and ceremonies took place. And if woodland resonated with these early monuments why not also with later ones? After all, large timber structures/henges are major monuments of the later Neolithic (Fig. 11.4) and involved the use of mature, sometimes massive, forest trees. It can be no co-incidence that many areas favoured for early monumentality continued to be places of significance: so what do monuments do to the places where they are built? Here we suggest that enclosures were cited in woodland with monumental space being defined not by the





Figure 11.4: Timber henge reconstructed in woodland (from *Shadowland* (p. 163) by kind permission of Steve Burrow. Photo: Steve Burrow)

removal of woodland, but by its location *within* woodland.

### ... and pits

Bradley (2000, chap. 8) has summarised the thoughts of various authors on the biography of objects, particularly in relation to the deposition of specific items, such as stone axes, in pits, and ways in which they might reflect basic perceptions of the landscape from which they originated. He suggests that 'in a number of quite different cases, it seems that if these objects returned to the elements from which they were formed. That may be one of the most basic processes linking particular kinds of material to the places where they are discovered' (*ibid.*, 121). Flint axes often occur in pits. In the Early Neolithic, flint to make axes was obtained from very deep pits and one of the principal uses for them seems to have been to clear woodland. Could we complete the circle by suggesting that some pits were actually dug in woodland?

### Coming out of the woods

As we have rehearsed elsewhere, archaeologists are very uncritical about providing evidence for the presence and extent of the postglacial wildwood (Allen & Gardiner 2009). Let us

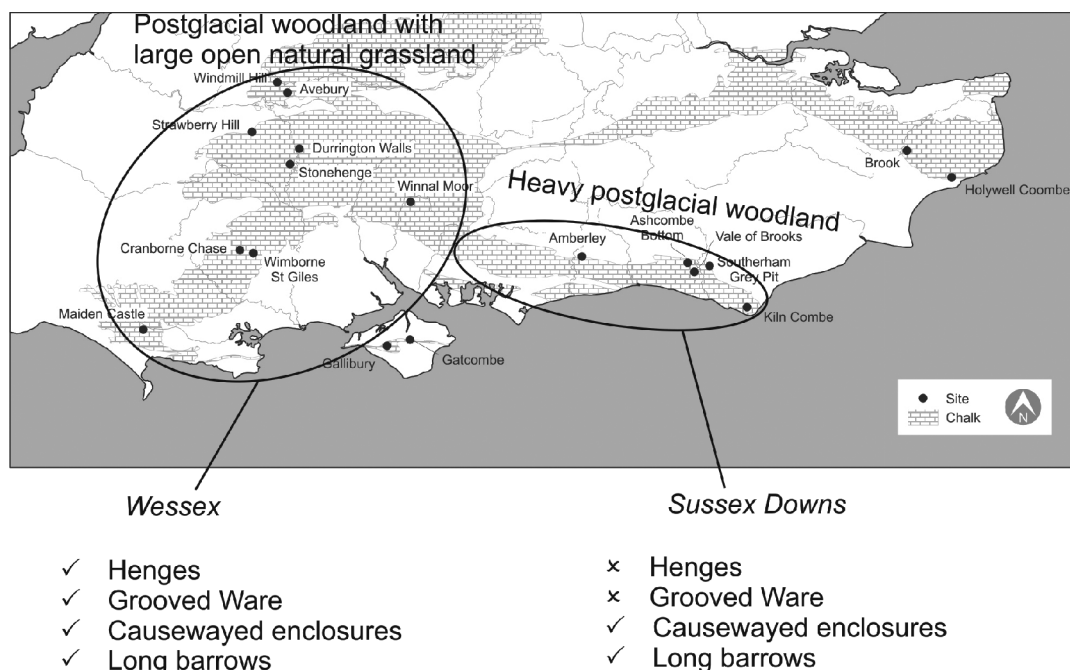
briefly look at the evidence for Sussex and Wessex. In particular we review and attempt to interpret spatial disparity for sites of later Neolithic activity.

After the last glaciation vegetation climax was typically dense, mixed oak woodland which, it is generally assumed, more-or-less universally and uniformly clothed Britain (Godwin 1940; 1962; 1975; Tansley 1939, among others) which early communities had to clear to till the soil beneath. The ubiquity of ancient woodland was challenged by Bush and Flenley (1986), who argued for the antiquity of some downland grassland; a view strongly opposed by Thomas on the basis of his work in Sussex (1989; Bush 1989).

Recent environmental research continues to support the hypothesis that Late Mesolithic and Early Neolithic postglacial woodland was fairly ubiquitous across the South Downs. We cannot find any obvious retardation in its development or yet isolate any large natural openings. The combination of site- and context-specific data (usually in the form of snails and charcoal) from long barrows (Alfriston and Marden), causewayed enclosures (Offham, Trundle, etc) and pit sites (Bishopstone), combined with longer, off-site, local environmental chronologies from colluvial sequences (Bell 1982; 1983; and Allen 1995; 2005b; 2007) and



Figure 11.5:  
Archaeological and  
ecological contrasts  
between the Wessex chalk  
and the South Downs



(taphonomic issues aside) wider pollen studies from the Sussex river valleys (Thorley 1981; Scaife & Burrin 1983; 1985; 1992; Waller & Hamilton 2000), confirms uniformity. Here, therefore, despite arguments to the contrary by Bush (1989), and Bush & Flenley (1986), we can be relatively sure that postglacial woodland developed over large areas of chalklands (Allen & Scaife 2007; Allen & Gardiner 2009).

For Wessex though, the recent suggestion that large tracts of open land existed into the earlier Neolithic is both exciting and interesting (French *et al.* 2003; 2007; French 2009; Allen & Gardiner 2009). So perhaps Bush and Flenley, and Thomas were both correct (Fig. 11.5). It is precisely in these natural openings – around Dorchester, Cranborne Chase and Stonehenge that later Neolithic activity is concentrated in the form of timber circles, henges, and Grooved Ware pits. Indeed many have a strong Mesolithic and demonstrable Early Neolithic antecedence (see above).

#### *Implications and trajectories*

In Wessex several natural open downland landscapes existed, inviting Mesolithic and Early Neolithic communities to exploit browsing and grazing animals and nuts, fruits, and berries of the woodland fringes. Long barrows, cursus monuments and, ultimately,

hengés could be built relatively freely without the physical encumbrance of heavy woodland. In these areas communities of apparently similar social organisation and employing entirely comparable material culture as those in Sussex chose to build similar monuments in a significantly different natural environment: woodland was incidental.

The combination of pre-existing open areas and of woodland in Wessex enabled increased local population centres and social freedom, and led to the development of communities who adopted significantly different types of material culture (eg, Peterborough and Grooved Ware), depositional practices, and monumental construction, to those evidenced in Sussex. Among the monumental landscapes of Wessex woodland is clearly referenced through the use of timber for construction, but in Sussex, which maintained its woodland cloak, there are no cursus monuments, henges, timber structures, or Grooved Ware – just trees. A distinction, therefore, exists between Wessex and Sussex (Fig. 11.5), and we suggest that its antecedence was rooted in earlier Neolithic landscape trajectories. The presence and nature of Late Neolithic activity was, to some extent, predicated on the nature of the landscape and the presence, or absence, of woodlands.

### ***Did a social hierarchy develop in Sussex and on what basis?***

It is clear that the development of Late Neolithic society in Sussex followed a rather different trajectory to that in Wessex. If we accept our suggestion that the emergence of the kind of social differentiation and organisation seen in Wessex, expressed most obviously through monumental construction, ritual deposition, and insignias of individual prestige, was effectively retarded in Sussex, what evidence (if any) is there for development in that direction? How did communities in Late Neolithic Sussex interact with more distant groups? Were they able to participate in emerging exchange networks involving increasingly exotic and high quality objects or to 'hold their own' in what became essentially a competitive market?

The basic 'home range' resources available in both our main areas of interest were very similar but Sussex had a trump card to play. For hundreds, possibly 1000, years, flint axes produced from the Sussex flint mines had been hugely important to communities all across southern England. The few mines identified in Hampshire and Wiltshire can have produced tiny numbers of artefacts by comparison. The importance of these objects, both in utilitarian and symbolic terms, did not diminish in the 3rd millennium – indeed their status may have been further enhanced by the developing penchant for the construction of timber monuments.

The Sussex flint mines fell out of use: very little Late Neolithic flintwork and no pottery has been found at any of the mine sites – but whether because they were perceived to have been worked out or for other reasons is unclear. Our contention is that this was the result of a dynamic shift in the social order that came about as large areas of East Sussex were finally opened up for farming, revealing a hitherto largely untapped source of good quality flint, right on the doorstep of newly cleared areas. The East Sussex Downs are plastered with Late Neolithic flint scatters (Gardiner 1984; 1986; 2008) utilising surface flint sources, with those founded on superficial deposits having access to abundant, very large, high quality nodules. The basic attributes and majority of artefact types are entirely in keeping with assemblages from all over the country so we can confidently say that technological development in Late Neolithic Sussex at least was not isolated. What

is very striking however, is the high incidence of axes in some flint scatters (forming up to 20% of the tool component as compared to an average of less than 5% elsewhere, with some individual scatters producing 200–300 axes) and, in particular, of (mostly broken) polished axes. Whereas the flint mines produced the basic commodity, these settlements were mass-producing top quality polished axes that were being exchanged over large distances for, amongst other things, stone axes, of which there is a very high incidence from a wide variety of sources. Furthermore, they were producing a whole range of finely made flint artefacts – various types of scale-flaked and polished knives in particular, which were also being circulated well beyond the Sussex Downs.

All this leads us to believe that some form of social hierarchy did indeed emerge on the Sussex Downs (discussed in more detail in Gardiner 2008). This was based on the controlled production and exchange of high status flint artefacts, especially axes, but it did not develop entirely along the lines, or to the same level as that in Wessex.

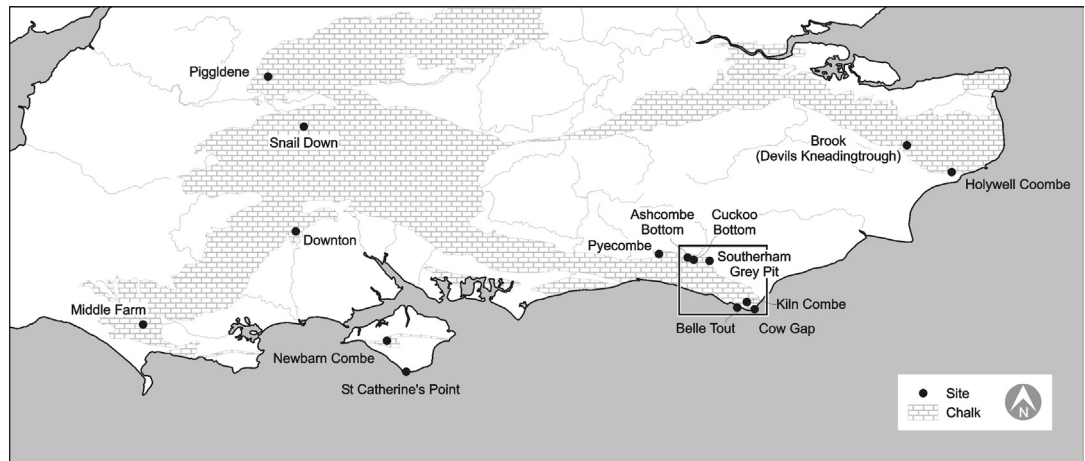
## **After the woodland**

### ***What is a Beaker flint assemblage?***

The essential 'otherness' of the Beaker Package is a topic that has exercised archaeologists for generations, since it clearly does not fit with what is known of the general tenure of material culture and social organisation of either the Late Neolithic or Early Bronze Age in Britain. We will not review it here, nor indeed the composition of Beaker grave groups, but suffice it to say that while flint assemblages of the period are abundant and bountiful it is unusual for there to be many flint objects in Beaker graves.

In Beaker graves there are rarely more than a handful of flints and these usually comprise a restricted range of forms which may be of exceptional workmanship and which are sometimes accompanied by a few lesser pieces. The recently published grave of the so-called Amesbury Archer is one of several notable exceptions. This grave included over 120 flint objects, many of which were placed in two caches in the grave (Harding 2011), itself an unusual but not unique occurrence (Halpin 1987, 331; Harding 1989; Barclay & Halpin

Figure 11.6: Beaker occupation sites on the chalkland of southern England



1999, 136, 140, fig. 4.76; Healy & Harding 2004). Fifteen finely made barbed and tanged arrowheads and a triangular one, two knife-daggers, and several fabricators stand out amongst what is, otherwise, an assemblage only really remarkable because of its inclusion in the grave. However, the deposition of this restricted repertoire of high quality flint artefacts is not a phenomenon confined to Beaker graves. They also occur, in varying combinations and associations, in other burials of the Chalcolithic and Early Bronze Age, alongside Collared Urns and accessory vessels (see, for example, Clarke *et al.* 1985, figs 4.96 & 4.98).

Furthermore, all the types of flint artefact that were selected for grave deposition occur widely, if not necessarily in large numbers, in surface assemblages that have no other obvious Beaker connotations – take them away and we are left with the ‘standard’ Late Neolithic–Early Bronze Age assemblage familiar to any lithics researcher. On the southern chalk these surface scatters can cover large areas, comprise many thousands of pieces, and clearly indicate the extensive and locally intensive occupation of the Downs over many hundreds of years.

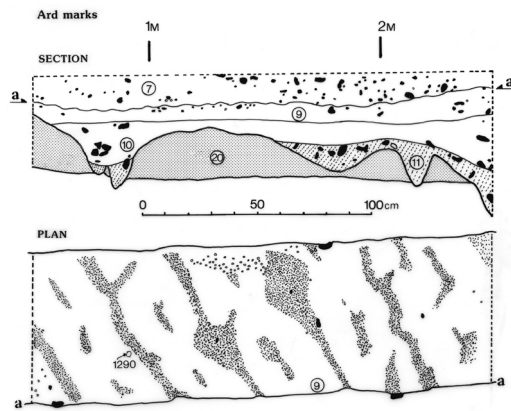
#### ***Chalcolithic settlement***

The status of ‘domestic’ Beaker pottery has never been comfortably explained and there are few convincing examples of Beaker domestic sites south of the Thames because comparatively little non-funerary pottery survives anyway, certainly not in association with surface flint scatters. We might ask, therefore, whether Beaker ‘sites’ exist at all in

the areas discussed here, while we appreciate that Beaker settlement material and/or buildings occur in other regions, eg, East Anglia and Scotland. Could it be that the lack of any dynamic change in the ‘everyday’ flint technology through from the Late Neolithic into the Early Bronze Age simply reflects an underlying, essentially stable, continuum of domestic occupation that was overlain by whatever the Beaker funerary package – with its egotism, exaggerated symbolism, and emphasis on ‘bling’ – actually represents in terms of social hierarchy and individual status? Is our ‘grass-roots’ Chalcolithic there all along and we just don’t know how to distinguish it on the ground?

Approaching from different points of view, each of us suggested in our doctoral research that ‘Beaker’ (Chalcolithic) settlements could be largely invisible because they lay buried under colluvium in valley bottoms and were invisible within large artefact distributions (Fig. 11.6). Allen (1988; 2005a) has identified Beaker associated soils both beneath – and indeed within – colluvium in a number of places in both Wessex and Sussex. There is no need to suggest that these are the only places where Chalcolithic settlements were *located* but hillwash deposits offer a comparatively rare opportunity for the survival of a combination of ceramics, flintwork, and accompanying palaeo-environmental and economic data, as well as former soil horizons, some striated with Beaker ard marks (Fig. 11.7). On upland slopes that have seen millennia of ploughing, all that will normally survive will be the lithic element. The gradual opening up and agricultural exploitation of the downlands led





to the inception of processes of soil erosion rather earlier in some areas than was previously thought but there is no indication that anything was driving *change* rather than *intensification* on the economic front (Allen & Maltby 2012) and no overhaul of domestic material culture was necessary, whatever role-playing was going on amongst the upper echelons of society.

### By way of conclusion; can't see the wood for the trees

We have posed a number of questions, generated some ideas, and gone some way to towards addressing them. We hope that these will encourage others time to consider these topics in more detail.

We consider that, during the Neolithic, woodlands were utilised places, not areas of irrelevance, exclusion or darkness and void of social actions (see also Pollard 2004). Many activities were designed to be conducted in woodland. They may have been small-scale and isolated, but they could also include the deliberate construction of whole, major, monuments which existed within the woods. Archaeologists often equate such large monuments, and extensive artefacts scatters, with rolling open downlands, but we hope that we have demonstrated the possibility, at least, that this may not necessarily be the case.

What remains to be done is to consider more carefully the ways in which people interacted with, and used, woodlands. We need to concentrate effort on teasing out the intractable, biased, and scant palaeo-environmental evidence and attempt to provide interpretations at highly localised levels associated with monuments, isolated features,



Figure 11.7: Plan and section of ard marks. Ard marks as excavated in buried Beaker colluvial soil. (Photo: Mike Allen)

and artefact scatters. Only then can we be sure if there is evidence to confirm, refute, or refine these postulations of woodland-based activities. Mesolithic communities may or may not have had ecological relations with hazelnuts, but Neolithic communities certainly had social and ecological relationships with woodland.

### Acknowledgement

Thank you Richard.

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## Conquest Ideology, Ritual, and Material Culture

*Heinrich Härke*

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*Conquest ideology may be seen as a particular form of legitimisation in which a real or claimed conquest by main force is used for the justification of current power relations. It is argued here that such an ideology may have material correlates and sets of related ritual or ritualised practices which may be identified in the archaeological record. The story of the real or imagined conquest underpinning conquest ideology is the 'conquest myth'; and 'conquest society' is used here as a shorthand to characterise a society which is divided along ethnic lines, with a population of immigrant stock dominating politically and socially. Modern correlates from different parts of the world are drawn upon as case studies to exemplify the creation and existence of conquest myths. Using the example of Anglo-Saxon England and several contemporary societies of post-Roman Europe, it is suggested that archaeological evidence can be used to demonstrate the presence of attendant rituals and material culture patterns and argue for the likely existence of a conquest ideology in these societies.*

For the past 30 or so years, Richard Bradley has explored issues of mentality and ideology in the past, approaching them via ritual and monuments. An early article of his (Bradley 1987) on this complex and challenging question was the direct inspiration for a conference paper I gave at the 2001 meeting of the Society for American Archaeology, and which forms the basis of the work presented here. It is therefore fitting that this paper is offered here as a tribute to Richard's inspirational work and publications.

Conquest ideology may be seen as a particular form of legitimisation in which a real

or claimed conquest by main force is used for the justification of current power relations. It is argued here that such an ideology may have material correlates and sets of related ritual or ritualised practices which may be identified in the archaeological record. The salient features of situations governed by conquest ideology may be seen and defined in modern cases such as Northern Ireland and South Africa. A testing ground for an archaeological approach is provided by post-Roman Europe (broadly speaking AD 400–600) which is rich in stories of migration and conquest. The archaeological case study for this paper is the Anglo-Saxon

'invasion' of England where rich and varied data allow the identification of a conquest myth, and of the ritual expression of a social ideology based on it.

For the purposes of this paper, 'conquest ideology' is defined as an attitude of mind and a set of related practices which explain and justify current social and political conditions (in particular relations of power) with a real or imagined conquest in the past. Such an ideology may create and shape its own realities wherever it is guiding or underpinning social and political action, or it may clash with day-to-day reality as perceived by actors within the situation and/or outside observers, either contemporary observers or (and this is more relevant here) later observers analysing the situation. This is 'ideology' in a Weberian rather than a Marxist sense: the socially and economically privileged strata of society using ideology (or more specifically religion, in Weber's view) to give legitimacy to their own way of life and social position (Weber 2001 [1922], 253). The story of the real or imagined conquest underpinning conquest ideology is the 'conquest myth'; and 'conquest society' is used here as a shorthand to characterise a society which is divided along ethnic lines, with a population of immigrant stock (often a minority of the overall population) dominating politically and socially.

### **Identifying the correlates: some modern cases**

Northern Ireland is probably one of the best case studies which allow us to identify links between conquest ideology, on the one hand, and ritual and material culture, on the other. In the seventeenth century, English kings encouraged large numbers of English-speaking Protestants to settle in Catholic, Irish-speaking Ireland which was at that time under their direct rule. Most of these settlers were concentrated in the north-east, in the province of Ulster, where they form a regional majority in an ethnically divided community, and where they have been in the positions of political and social power throughout much of their history. This situation was threatened, at the end of the 17th century, when the Catholic pretender to the English throne, King James II, invaded Ireland. The threat ended with the major Catholic defeat on July 12, 1690 in the

Battle of the Boyne where they were beaten by the army of the Protestant King William – the 'King Billy' of Ulster mythology.

Today's Protestant community of Northern Ireland celebrates this particular event as a story of conquest and deliverance, with annual marches, triumphal arches, and the re-enactment of certain episodes, like the closing of the gates of Londonderry (the name the Protestant settlers gave to Derry) to the army of King James II in 1688 (McBride 1997). This annual ritual re-affirms Protestant identity as well as claims to power, and it is seen and experienced as such by the Catholic community that feels threatened and intimidated by this ritual. Other symbols of group allegiance are displayed throughout the year, but with particular fervour or with new paint in the summer marching season: murals, flags, and kerbstones painted in 'ethnic' colours (the Protestants using the colours of the Union Jack, the Catholics reproducing the colours of the Irish Tricolour). Murals, in particular, emphasise the conquest theme in connection with 'King Billy', usually depicted as crossing the river Boyne, or landing at Carrickfergus, often together with his lieutenant Adolf von Schaumburg (Rolston 1991; 1992).

This theme which Rolston has called the 'ritualised depiction of a historico-mythical event' (Rolston 1992, v) has been displayed in Loyalist murals in almost invariable fashion since 1908 – in other words: from the time when it became likely that Britain would cede substantial devolved power to a Catholic-dominated assembly in Dublin. This would have been perceived as a threat to the Protestant domination which was saved, in Ulster, by the establishment of a separate Northern Ireland which stayed loyal to the British Crown, in contrast to the breakaway Irish Free State in southern Ireland. In terms of the archaeological correlates discussed below in the post-Roman case study, it is important to note that the vast majority of legally owned firearms in Northern Ireland have been in the hands of Protestants; Catholics have not been barred from owning weapons, but they have found it more difficult to obtain a firearms licence from the predominantly Protestant police.

Since 1984, with the beginnings of a political process to find a solution to the Ulster Troubles, and even more so since the Anglo-Irish Agreement of 1985 which gave the



Figure 12.1: Re-enactment of the Great Trek in South Africa (*Sunday Times*, 19 May 1996)



Dublin government some say in the affairs of Northern Ireland, the use of violent imagery in murals has increased, as has the fervour of the annual marches. By sheer coincidence, the same year saw an increase in celebrations of colonial origins and immigrant identities at the southern end of the western world: in South Africa, the years between 1985 when civil unrest started, to the end of the 1980s when the apartheid regime ended, saw an increase in historical plays, re-enactments of wagon treks, and burials of time capsules carried out by the ruling Afrikaner minority in what Hall (2000, 153) has called the 'theatre of memory' where the past is re-enacted, reworked and re-appropriated in order to serve the present.

South Africa was settled by white Europeans from the middle of the 17th century onwards. In 1838, Afrikaners (settlers of Dutch descent) who were dissatisfied with British rule which they felt was too inclined to protect the non-whites, left the Cape province to move inland in large wagon treks. This Great Trek became a defining moment in the memory and identity of Afrikaners, and it is complemented by the act of conquest: the defeat of the Zulu army at the aptly named Blood River on 16 December 1838. The Afrikaners celebrated this 'sacred history' (Moodie 1978, 204, 207–11) and their ancestral heroes, the Voortrekkers, with regular re-enactments (Fig. 12.1) which re-affirmed their right to rule by conquest – and never more so than when this rule was threatened (Hall 2000, 153–6). For the archaeological case study below, it is again enlightening to note the patterns of ownership and display of weapons

in this 'conquest society'. In the final stages of the apartheid state, whites owned and carried firearms, Zulus of the (officially tolerated and supported) Inkatha movement displayed so-called 'traditional weapons' at mass meetings and demonstrations, whilst other blacks were not allowed any weapons at all.

A case can probably be made, too, for the existence of a conquest myth in the United States and in Israel, but the two modern cases discussed above should be enough to establish key features and correlates. What they have in common is that they are settler societies created by an immigration which resulted in an ethnically or racially divided society. The divisions between immigrants and natives are marked: the immigrants are in control of the political, social and economic means of power (status positions, property, arms), whilst the natives have an inferior socio-political and legal status. This situation is explained and legitimised by a conquest myth in which the immigration becomes a story of conquest by heroic deed and/or main force, and in which the defeat of the natives is explained in terms of their inferior abilities and characteristics (intellect, social organisation, religion, etc.). These social divisions and real or imagined differences have been regularly re-affirmed in ritual and symbolism, with particular emphasis given to ritual re-enactments or depictions of the conquest myth. This re-affirmation may be particularly marked where the dominant position of the immigrants is threatened, be this because they are in a minority, or because of changes in the political constellation. Some

of these features have counterparts in, or are expressed through, material culture and should therefore be identifiable in the archaeological record.

### **Archaeological case study: the European Migration Period**

The European Migration Period which led to a profound reshuffle of the ethnic and linguistic map of western, central and southern Europe in the 4th–7th centuries AD is a period rich in stories of migration and conquest, involving peoples and regions from southern Scandinavia to northern Africa, and from Ireland to the Black Sea (Todd 2001). Stories going back to this period are part of the origin myths of many modern European nations: claimed immigrant ancestors are the Scotti in Scotland, Anglo-Saxons in England, Bretons in Brittany, Franks in France, Alamanni in Switzerland and south-west Germany, Goths and Suevi in the Iberian peninsula, Lombards in Northern Italy, Slavs in the Balkans, Magyars in Hungary, Sarmatians in Poland, Avars and Alans in the North Caucasus – and these are just some of the most important cases.

The Anglo-Saxons in England are a good case study of these European migrations and their attendant conquest myths. The few historical sources (Gildas, Bede, the *Anglo-Saxon Chronicle*) describe the immigration of the Angles, Saxons, Jutes, and other tribes from the continent into post-Roman Britain from the 5th century AD in terms of a series of sharply defined events leading to military take-over and settlement (Stenton 1979; Myres 1986). The immigrants introduced a new language, Old English, which eventually became the dominant language of England (Hines 1990). Archaeology has demonstrated the appearance, from the 5th century onwards, of new house types, new settlement types, a new burial rite, and an entirely new material culture, all of which, despite all recent debate and doubt (Hodges 1989; Higham 1992; Hills 2003), is still best explained in terms of an immigration from northern Germany and southern Scandinavia (Burmeister 2000; Härke 2002).

There is a strong conquest myth underlying the stories of invasion in Bede's *Ecclesiastical History*, and in particular in the *Anglo-Saxon Chronicle* (Whitelock 1979). Anglo-Saxon

warrior groups are, time and again, said to arrive in three ships. Some of their leaders bear clearly mythical names, such as Hengist and Horsa ('stallion' and 'horse') whose names may be linked to a pagan Germanic horse cult (cf. the archaeological evidence of horse burials and sacrifice: Müller-Wille 1972; Fern 2007); and these leaders, and the Anglo-Saxon kings descended from them, trace their ancestry back to the Germanic god Woden (Wotan, later name Odin). The *Anglo-Saxon Chronicle*, the most detailed of our main sources, reports only Anglo-Saxon victories over the natives, and not a single defeat – those are only reported by the Celtic monk Gildas who provides the native perspective in his treatise *De Excidio and Conquestu Britanniae*. Also, at least one of the most prominent leaders of the conquest, the West Saxon Cerdic, has a suspiciously Celtic-sounding name (possibly derived from Caradoc, latinised Coroticus), suggesting the possibility of ethnically mixed warbands from which the non-Germanic members were 'cleansed' in the later stories.

Even more intriguingly, in the region allegedly conquered by Cerdic, Wessex, the story of heroic victory over the natives falls apart when compared to archaeology (Fig. 12.2). The *Anglo-Saxon Chronicle* provides the outline of a narrative of landing on the coast, and gradual, violent progress inland, one battle after another, one sacked town after another. But when we add the Anglo-Saxon cemeteries to the map, it turns out that cemeteries with Germanic-style burials and with Germanic grave-goods predate the reported 'conquest' by decades, in some cases by a century or more. Historians and archaeologists have therefore tended increasingly to see the reports in the *Anglo-Saxon Chronicle* and even Bede's *Ecclesiastical History* as elements of a conquest myth (Sims-Williams 1983; Yorke 1993).

Other key features of the modern cases discussed above can also be identified in early Anglo-Saxon England. One of the earliest law codes (that of king Ine of Wessex, issued between AD 688 and 694) distinguishes between Englishmen (ie, descendants of immigrants) and Welshmen (ie, native Britons), with the latter clearly assigned a lower status: most of them are unfree; their *wergild* (money value of their life) is only half that of Saxons; and their sworn testimony counts only half that of a Saxon in a court of law (Whitelock

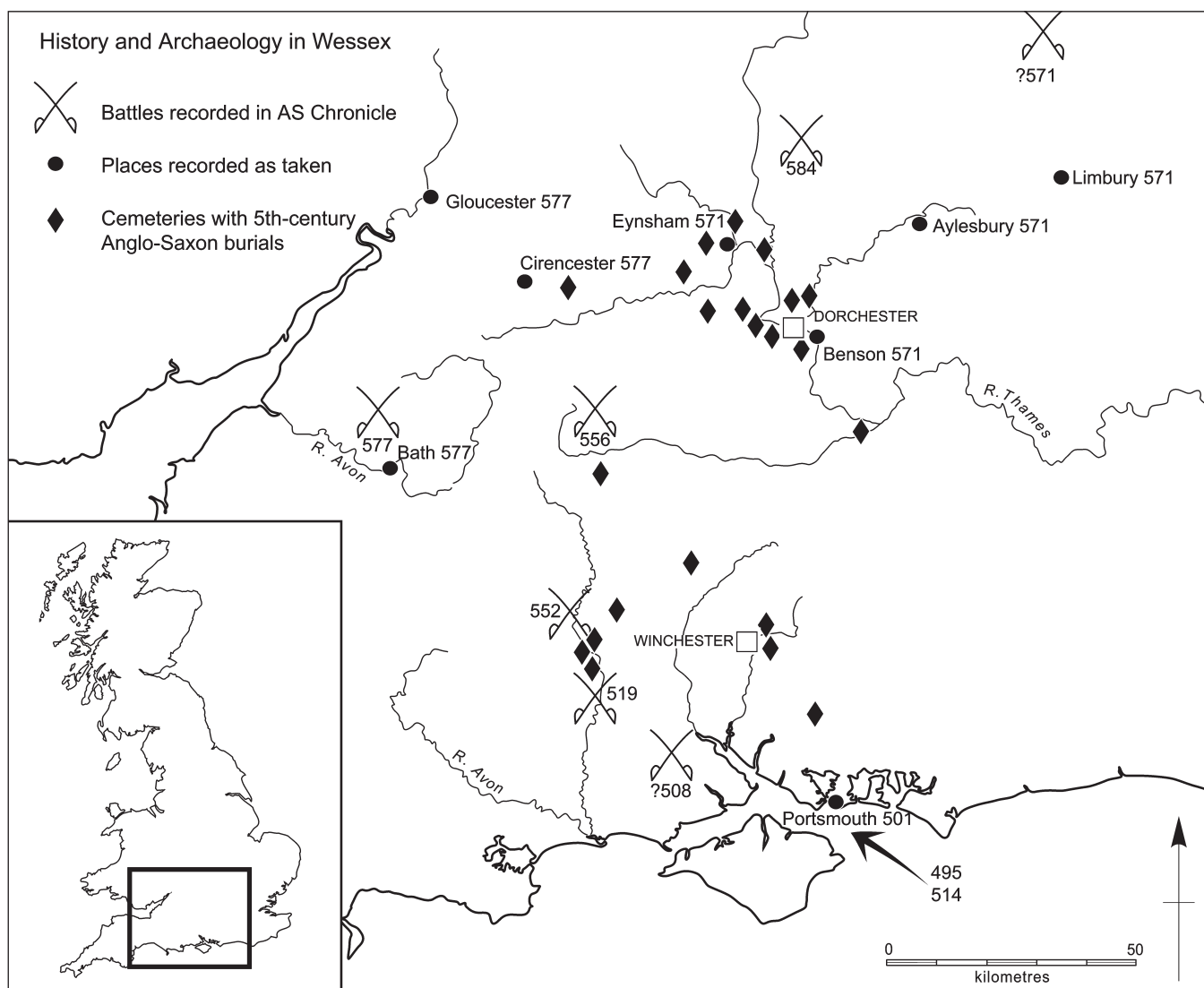


Figure 12.2: History and archaeology in Wessex, 5th/6th centuries AD (after Brown 1978, with additions and amendments)

1979). Other, contemporary law codes make similar distinctions, but without naming the Britons. Prohibition of intermarriage between the immigrants and natives, whilst known from contemporary conquest societies such as Visigothic Spain, is not explicitly documented for Anglo-Saxon England, but has been suggested as a likely explanation of the modern Y-chromosome DNA pattern (Thomas *et al.* 2006). Also, a series of Old English place-names from this period, those starting in Wal- (eg, Walton, Wallingford), designate settlements of native Britons ('Welsh' in Old English), thus indicating native enclaves within Anglo-Saxon kingdoms (Cameron 1980). There also appears to have been an element of control of arms by the dominant immigrants: law codes stipulate

penalties for giving arms to slaves (*Laws of Ine*, 29; Whitelock 1979); and as the same law codes show that the majority of the native population were slaves or of semi-free status, this implies that the Britons were kept mainly disarmed. And the monk Bede, the first English historian, justifies in his *Historia Ecclesiastica Gentis Anglorum* the defeat of the native Britons with their failure to convert the immigrants to Christianity upon arrival in England.

Material culture symbolism which may have been directly connected with conquest ideology is more difficult to detect because by the time the Anglo-Saxon immigrants arrived in substantial numbers, the native Romano-British material culture had virtually disappeared, making the native Britons archaeologically almost 'invisible' (Härke 2007). But it may be significant that

the immigrants developed, within about two generations, a flourishing material culture style of their own, similar to, but distinct from, that of the continental homelands, with richly elaborated, regional dress styles. There are, however, two features which may be interpreted as ritual re-enactment of the conquest myth: the weapon burial rite, and the re-use of prehistoric barrows for burial.

Weapons were deposited in the graves of just under 50% of male adults in Anglo-Saxon cemeteries of the 5th/6th centuries AD (Härke 1990; 1992a for the following outline); this compares with only about 10% of men with weapons in the cemeteries of the continental homelands. The conventional interpretation has been that these are 'warrior graves'—graves of fighting men buried with the tools of their Dark Age trade. However, there are numerous indicators suggesting that the label and its apparent implications are misleading: the weapons deposited in graves rarely make up functional sets of armament, they appear to be tokens from the possessions of the living; and there is a high proportion of individuals buried with weapons who were far too young, too old or too infirm to fight, whilst many healthy men, including half of those killed by violent means, were buried without weapons. Further, detailed analysis of skeletal data (in particular stature and non-metric traits) in conjunction with the archaeological data suggests that men buried with weapons were the descendants of Germanic immigrants, while the majority of men buried without weapons in the same cemeteries were native Britons. The latter could probably be buried in 'Anglo-Saxon' cemeteries because, as slaves, they were part of the extended household structure of Anglo-Saxon society (Herlihy 1985; Härke 1997; Sayer 2007, 2009). Significantly, the weapon burial rite was at its most widespread and frequent in the early sixth century which, according to the written sources (Gildas, *Anglo-Saxon Chronicle*; cf. Sims-Williams 1983) was a comparably peaceful interlude between two phases of violent Anglo-Saxon expansion.

All these observations point to the Anglo-Saxon weapon burial rite being a symbolic act by which the families of immigrant descent distinguished their menfolk from those of the natives. The weapons themselves suggest a martial symbolism, one that was re-enacted across the Anglo-Saxon settlement areas

for some 200 years after the start of the immigration. Its interpretation as the expression of a conquest ideology also makes sense in the light of more recent population re-assessments which suggest that the immigrants and their descendants were a minority in England (Härke 2002). It may, therefore, be significant that in the seventh century, when Christianisation and the increasing acculturation of the natives began to create a common culture and a common religion for both populations, the weapon burial rite changed its symbolic meaning from ethnic to social indicator, and was then phased out altogether in the eighth century (Härke 1992b).

Another feature which may be interpreted in similar terms is the deliberate re-use of prehistoric barrows in the 6th/7th centuries AD: in this phase a large proportion of Anglo-Saxon burials are located around, and in many cases right inside, earlier burial monuments, mostly Bronze Age barrows. Bradley (1987; 1993; 1998), Williams (1997; 1998) and Thäte (2007) have seen such re-use as an attempt to legitimise the present by linking it to a mythical past. But seeing that the older funerary deposit inside the barrow is regularly destroyed by the Anglo-Saxon burial, re-use may also have been an expression of triumphalism (P. Heather, pers. comm.): the native tradition, or rather what was perceived as the indigenous tradition of the land, was being rooted out and replaced by burials of the immigrant tradition.

## Conclusions

While there is space here to look at only one archaeological case study, other regions of early medieval Europe show similar features; and in particular, the weapon burial rite is practised there in closely similar fashion and frequency. But weapon burial is, at the same time, a warning against over-interpretation: the particular meaning of the weapon burial rite suggested here is not universal—it is context-specific. And while it is likely to apply in other cases of conquest societies practising weapon burial as a selective rite, weapons are also found in the graves of societies without recorded immigration, eg, Late Iron Age and Viking Period Scandinavia, where their meaning must have been different. And as emphasised above, even in Anglo-Saxon England the meaning of the weapon burial rite did not remain static.



In spite of such limitations, the evidence suggests a clear enough conclusion. In the case of Anglo-Saxon England and several contemporary societies of post-Roman Europe, textual evidence shows the existence of a conquest myth and of legal status definitions along ethnic lines; and archaeological evidence can be used to demonstrate the presence of attendant rituals and material culture patterns. On this basis, it is possible to argue the likely existence of a conquest ideology in these societies. But at the same time, the wide range of evidence needed to arrive at this conclusion raises a general question of methodology for the inference of ideology from archaeological evidence. Could the existence and expression of a conquest myth, let alone a conquest ideology, really be identified by *purely archaeological* means? This obviously needs more exploration in other cases, but some caution may be in order: the identification of a conquest ideology, and in particular its distinction from the expression of other forms of social and political ideology, may well require archaeologists to use supporting evidence such as textual sources, iconographic evidence or ethnographic records.

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## Diversity and Distinction: characterising the individual buried at Wilsford G58, Wiltshire

*Ann Woodward and Stuart Needham*

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*The Early Bronze Age grave from Wilsford barrow G58, Wiltshire, one of the more unusual and intriguing among the 'Wessex' grave series, is re-examined. There was no gold, jet, shale or amber: just two enigmatic items in bronze and a series of seemingly mundane stone and bone objects. However, although most of the materials would not normally be considered to be exotic, there is a case for most or all having had unusual functions or connotations, which are explored fully in the paper. The group is exceptional in its own right and has an exciting story to tell.*

The recent project *Ritual in Early Bronze Age Grave Goods*, funded by The Leverhulme Trust and the University of Birmingham, was designed to re-explore the significance of burial assemblages from Beaker and Early Bronze Age contexts in England. The 13-strong interdisciplinary team included finds specialists, geochemists and geologists, experts in the (micro-)identification of various raw materials and faunal remains. A major aim was to study classes of artefact which had received little attention previously. Thus, in addition to the study of items of gold, bronze and amber, the project targeted objects made from stone, jet or jet-like materials and bone or antler. The key objective was to assess the nature and function of grave goods and to test the hypothesis that many of the artefacts were originally designed for use either as components of ritual costume or as other

specialised equipment for religious ceremonies. The three major approaches were: to investigate object function by studying morphology, traces of manufacture and any use wear; to closely identify the nature of the raw materials and, where possible, their source locations; and, finally, to see whether patterns of fragmentation and/or extreme use wear might indicate the inclusion of ancestral heirloom items.

The overall results will be presented according to object category (Woodward *et al.* in prep.), but the data gathered can also further our understanding of the nature and significance of individual grave groups. Detailed studies have already been published for two of the most famous Early Bronze Age artefact groups from Wessex: Clandon (Winterborne St Martin G31, Dorset: Needham & Woodward 2008) and Bush Barrow (Wilsford G5, Wiltshire: Needham *et al.* 2010). In contrast, here we re-examine the

finds from a rather less well-known grave, that from Wilsford barrow G58, Wiltshire. There was no gold, jet, shale or amber: just two enigmatic items in bronze and a series of seemingly mundane stone and bone objects. However, the group is exceptional in its own right and we believe it has an equally exciting story to tell. The objects, which are housed in the Wiltshire Heritage Museum, Devizes, were studied by the authors in conjunction with John Hunter, David Bukach (photographer), Mark Maltby (faunal remains specialist) and Rob Ixer (stone analysis).

Richard Bradley has been highly supportive of this research project, and although he seldom ventured into the realms of detailed finds reports himself, the aims of the project reflect several of the research strands that have characterised his wide-ranging contributions to the study of prehistory. With reference to some of his more recent publications one may highlight topics such as: the importance of sourcing raw materials (Bradley 2000, 81–90; 2009a), the analysis of the symbolic significance of colour and texture (Bradley 2009a), the importance of studying fragmentation (Bradley 2005, 151–60), the social roles of heirlooms and relics (Bradley 2002, 53–8) and the definition of social identity using evidence from different types of material placed in graves (Bradley 2007, 158–68; 2009b).

Wilsford barrow G58 is a large bell barrow (Hoare's no. 18), excavated by William Cunnington for Richard Colt Hoare in June 1807, the westernmost of a nucleated barrow cemetery known as the Wilsford Group (Cunnington letters, book 13, p. 9 no. 11; Hoare 1812, 207–9). The group is situated 2.4 km south of Stonehenge and, if the surrounding trees were not present, would be visible from that monument (Exon *et al.* 2000, 102; RCHME 1979, map 2). It is little visited today, partly because it does not lie near any public right of way, and partly because the still upstanding barrows are masked by woodland and dense box planting; others of the group are almost entirely ploughed out in the adjacent field to the north (Bowden 2010, figs 2–4 & 6). According to Hoare, G58 was 'the monarch of this group, both as to its superior size, as well as contents' (Hoare 1812, 209). Its position at the western end of the barrow group may reflect a pattern seen for some other exceptional grave groups in barrow cemeteries nearby, notably

Bush Barrow within the Normanton Down group, and the King Barrow in the original configuration of the Winterbourne Stoke group (Bowden 2010, 13).

Hoare closely followed Cunnington's account of the grave:

'On the floor of the barrow we found the skeleton of a very tall and stout man, lying on his right side, with his head towards the south-east. At his feet were laid a massive hammer of dark-coloured stone, a brass celt, a tube of bone, a handle to some instrument of the same, a whetstone with a groove in the centre, and several other articles of bone, amongst which is the enormous tusk of a wild boar; but amongst these numerous relics, the most curious article is one of twisted brass, whose ancient use, I leave to my learned brother antiquaries to ascertain ...' (Hoare 1812, 209).

This 'curious article' was illustrated, together with the axehead and the tusk, in his plate xxix, while the bone plate appears in plate xxviii, 5 apparently as a mistake for an object from barrow 16 (Wilsford G60; as noted by Annable & Simpson 1964, 50). The grave group is Piggott's Wessex Grave number 89 (Piggott 1938, 106) and was first considered in detail by Thomas (1954). He provided the first modern drawings of the finds (*ibid.*, fig. 5) and those within the Devizes Museum Catalogue followed (Annable & Simpson 1964, 47–8 and 102, nos 211–8).

## Bone tube

This hollowed bone is 214 mm long, 30 × 24 mm at the surviving end and of mid-shaft diameter 18.5 mm (Fig. 13.1, 1). Both ends had been squared off, though one has a thickish flattened rim, while the other has a thin tapered one; the inside of the bone has been scraped out to provide an even, circular cross profile (Thomas 1954, fig. 3). The exterior was carefully polished, with faint, longitudinal striations visible towards the unbroken end. The object has been broken during the 20th century, but fortunately Goddard had recorded a side hole at the now damaged end leading Thomas (1954, 323) to suggest tentatively that this piece might have been a horn; Megaw (1968, 356) was less convinced.

This object is the largest of a series of tube-like artefacts of Early Bronze Age date which may have functioned as wind instruments. Most of the parallels were formed from the tibia of a sheep or goat, but an example from



Figure 13.1: Wilsford G58. 1 bone tube, 2 antler handle, 3 bone plate, 4 boar's tusk, 5 grooved stone block, 6 bronze low-flanged axehead (© Leverhulme project and Wiltshire Heritage Museum)



Wilsford G23 (Normanton Group) was made from the leg bone of a crane (not swan, *pace* Thomas 1954). The crane is revered for exhibiting many human characteristics, such as bipedalism, groupings of nuclear families, lasting monogamous pairing, and, especially, their circle dancing. Similarly, the material used for the Wilsford G58 piece could have been of symbolic importance, as it is made from a human thighbone (femur).

### Antler handle

A tapering, well polished handle is made

from a stem section of red deer antler (120.1 × 41.2 mm and 17.2 mm thick at base); it is asymmetrically curved in plan with oval cross-section (Fig. 13.1, 2). A cylindrical socket at the narrower end has worn edges and a fine crack developed, apparently in antiquity. The socket at the wider end has a squashed hexagonal shape (25.5 × 6.7 mm and 37 mm deep) and is also worn, though some wear may be due to modern attempts to see if the bronze axehead fitted; two long cracks running back from the mouth have relatively crisp edges. The tang received by this socket would have been further secured by rivets through two neat circular

perforations (minimum diameter 3 mm and 4 mm), one with countersink holes in either face. It is uncertain whether they were original or secondary additions; their edges remain very crisp, but this might simply mean that the rivets or pegs fitted so tightly that there was no room for movement.

The degree of wear of the end sockets suggests the object had seen much use and it may even have been modified for secondary hafting. The broader socket, in its current form, does let in the associated bronze axehead, but Cunnington's account makes no mention of these two belonging together and it would be an unusual hafting for an instrument with flanged sides. We cannot rule out some wedging of the tang held, so precise shape may not help. The handle does not have to have held metal and would be entirely appropriate for, say, a flint knife, dagger, or sickle. The top socket would have allowed a pommel to be mounted by its tang or a separate peg.

Very few handles of Early Bronze Age date are known, but all studied by the project were well-used and some modified during their use lives; thus they appear to have been valued items, worth keeping in circulation. Some were placed in the grave without the implement they last held, recalling the phenomenon recognised for some dagger/knife pommels (Hardaker 1974, 49). Many pommels also show evidence of extreme use and sometimes re-use (Woodward *et al.* in prep.). These unprepossessing handles could therefore have been significant in their own right, either as heirlooms or because of what they symbolised.

## Bone plate

A flat rectangular bone plate, 60.3 × 15.0 mm and 10.5 mm thick, was cut from a shaft of large mammal rib, thus exposing cancellous tissue on all four sides, but the faces are polished (Fig. 13.1, 3). A single perforation was drilled laterally through each end of the plate; the only undamaged exit hole is 4.2 mm in diameter. The rear face shows distinct signs of ancient wear but traces of wear within the extant perforation are obscured by modern damage.

A series of five such bone plates, all from rich Early Bronze Age burials in Wiltshire, are variable in size and form. However, all are neatly cut from polished ribs, probably of

cattle, and three examples carry perforations in varying configurations. Wear is not heavy, and the perforations in particular show no obvious signs of wear from strings or cordage. This would suggest no significant movement between the 'threads' and the object, thus militating against their interpretation as spacer plates for necklaces, a suggestion offered by Thomas (1954, 319, 324). In fact, they are quite dissimilar to the bone versions of jet spacer plates known from East Anglia and none of them are associated with beads of any kind. Equally, the lack of perforation wear would discount their use as belt fasteners or strap runners.

The plates are always thin and an example from Norton Bavant G2 was embellished with further fastenings in the form of contrasting copper wire. Although unlikely to be wristguards as such (Thomas 1954), these plates could nevertheless have been fixed to leather or textile as ornaments for the lower arm, or indeed elsewhere on the body.

## Boar's tusk

An almost complete canine (130 × 26 mm) came from the right mandible of a male, wild boar; the tip bears green stains (Fig. 13.1, 4). The proximal end was broken in antiquity, so the original presence of any perforation(s) cannot be determined. The inner facet, worn during the life of the animal, was modified further, evidenced by faint, irregular, longitudinal striations (M. Maltby, pers. comm.).

Pig tusks are known from graves dating from the Early Neolithic through to the Early Bronze Age. Graves of Chalcolithic/Early Bronze Age date include 16 inhumations and just one cremation, two representing males and three, females. Human modification, where it can be identified, is usually slight and it may therefore seem an unpromising indicator for functional interpretation. In the past, they have often been interpreted as 'blades' or tools, but we now think that most, and perhaps all, of the tusks were in fact intended as ornaments.

Only eight of 36 tusks studied, including this example, had been sharpened by human enhancement of the distal end. The little wear that was observed comprises general scuffing and smoothing, suggestive of fabric rub or handling. There are only three cases where wear might possibly have been caused by using

the tusk as a tool. Two of Early Bronze Age date were clearly designed as pendants and four additional tusks studied have surviving perforations. Yet there is virtually no wear around the perforations to suggest they hung freely, and the only wear groove lies at an angle to the long axis, implying that the tusk was sewn onto a garment at a chosen diagonal. Indeed, the perforated tusks with the burial at Upton Lovell G2a, the so-called 'shaman burial', were found around the legs along with a large number of perforated bone points, and probably served to decorate an elaborate costume (Piggott 1962, 93). Tusks were associated with other ornaments in five of the grave groups studied. The dated example from Raunds Barrow 1 (Harding & Healy 2007, 255) shows that some tusks could be very old when placed in the grave: they may have functioned as important ancestral relics and/or hunting trophies.

### Grooved stone block

This neat stone block is nearly rectangular in shape, measuring  $73 \times 55 \times 18.6$  mm, with rounded corners (Fig. 13.1, 5). The lower and side surfaces are convex, while the upper surface is very flat to either side of an axial groove, 17 to 19 mm wide and 5.5 mm deep. The groove is fairly regular, has a sub-V section and its width is more than twice its depth. It is made from a piece of sarsen, which would have been available locally (identified by Rob Ixer). The groove's form is not suitable for sharpening metal blades, but instead for sanding down long shafts. Wide, diagonal striations on the sides of the groove could derive from either its original shaping or a partly rotational grinding action. There are also fainter longitudinal scratches in the groove, while a linear area of smoothing on the back may be due to persistent finger pressure. There is an ancient spall at one end of the back.

A total of 15 similar grooved stones from Britain were listed by Newall in 1932, and to these may be added the pair from Breach Farm, Glamorgan (Grimes 1938, fig. 4). All come from mature Early Bronze Age graves (both inhumations and cremations), which presents an intriguing contrast with continental parallels in Beaker burial contexts (eg, Harrison 1980, 39, fig. 26.7–8; 55–6). The specific shape suggests they were designed for a particular

purpose, logically for reducing the surfaces of longitudinal shafts, probably made from wood or bone. They could have been used in pairs, clamped round a shaft, and have sometimes been seen as 'arrowshaft-straighteners', but this seems unlikely as surviving arrowshafts are in the order of 7–10 mm in diameter (Clark 1963, 74), much smaller than the grooves on these stones. They would serve to trim thicker shafts for other implements even though some of the grooves are not completely straight; the grinding action could have been a combination of longitudinal and rotational.

Grooved blocks are, in fact, rarely associated with flint arrowheads (Breach Farm and Roundway G5b are exceptions) and instead tend to occur in well furnished graves which contain metal items alongside other unusual pieces of equipment made from bone or antler.

### Stone battle-axe

This rather squat battle-axe has a near-central perforation and is almost symmetrical from end to end, especially in profile; it has a moderately marked waist and both ends present strong convex curves (Fig. 13.2). In plan, the butt end is broad and rounded, while the other tapers slightly more to a blunt 'cutting edge'. It is 105.5 mm long, 58.5 mm wide, 64 mm deep at the butt, 62.5 mm at the edge, and 37.5 mm at the waist. The perforation has a slightly hourglass profile with a minimum diameter of 20 mm. Both perforation and most of the exterior have a light polish with a soapy feel, but this is peppered with mini-pocks due to the nature of the material. The rock is dark greyish green and has been identified as ungrouped greenstone (Stone & Wallis 1951, 146, no. 294; Clough & Cummins 1988, 157, Wi 77), most likely originating in Cornwall (F. Roe, pers. comm.).

Fiona Roe originally classified this as a stage IVB battle-axe, falling within the Wilsford Group named after this find (Roe 1966, 211, fig. 7b; 238, no. 233). It would probably be categorised as 'intermediate' in terms of her later three-phase simplification of the battle-axe series (Roe 1979, 23; 25, fig. 2). Subsequent dating evidence (eg, Sheridan 2007) suggests a plurality of battle-axe forms by Period 3, previously acknowledged by Roe's overlapping 'Groups', and the Wilsford G58 example certainly fits best here.

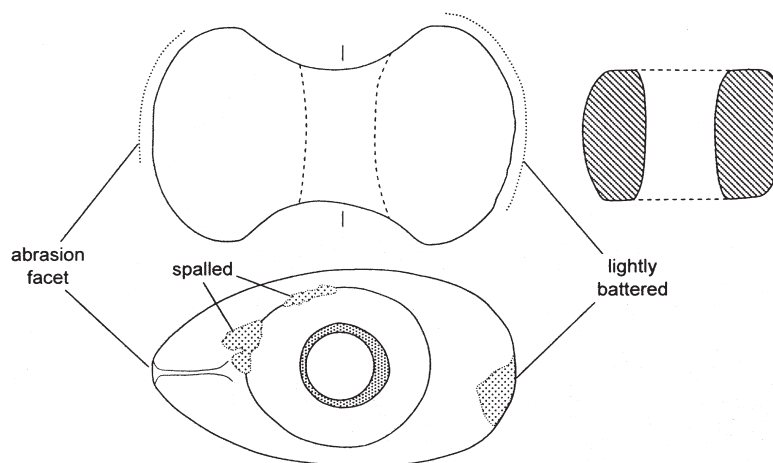
Nicholas Thomas described the implement as ‘much-used’ (1954, 324), and there is evidence for abrasion across much of the butt and cutting edge; indeed, part of the latter has been blunted into a facet. Nevertheless, intact surfaces suggest that no more than 2 mm has been lost from the original length and its shape is virtually unaltered. A battle-axe believed to be from a grave at Windmill Hill, Avebury, is similar (Thomas 1954; Annable & Simpson 1964, 49, no. 234) and battle-axes amongst Roe’s Crichie Group compare well in their dumpiness, waisted profiles and obtuse edges (eg, Broomend of Crichie itself – Roe 1966, fig. 7b, no. 350); as do a few others found in Ireland (eg, Simpson 1990, especially nos 48, 54, 67, 68, 81, 83).

### Bronze low-flanged axehead

The bronze axe-like object, at just 83 mm long, 34 mm wide at the cutting edge and 8 mm broad across the flanges, could be classed functionally as a chisel, but for the reasons given below is better regarded as a diminutive axehead (Fig. 13.1, 6). Its sides flare steadily from a convex butt and then turn sharply outwards close to the blade tips. Although low (0.7 mm), the side flanges are extremely neatly fashioned with steep inner faces in cross-section; the sides of the object are convex. The butt is finished with a very fine bevel. Corrosion may obscure a rounded bevel about 13 mm above the cutting edge. Damage to the edge itself, towards either blade tip, is probably due to corrosion.

The surface splits into two broad zones: the haft-end presents a smooth, olive-green patina, while the blade features lumpy, brighter green corrosion products. This is likely due to the object having been in its haft when buried. Certain features at this surface junction on one face give the illusion of a straight line across the middle which has sometimes been depicted, misleadingly, as a stop bevel (Thomas 1954, 322, fig. 3; Annable & Simpson 1964, 102, fig. 213; cf Hoare 1812, pl. xxix).

Early Bronze Age implements that are patently chisels or stakes have narrow tangs rather than the side-flanged haft-end seen on the Wilsford implement. This latter feature relates it to the axe series, even if small size implies a specialised function – utilitarian or symbolic. It is noteworthy that five other contemporary graves (Period 3) have yielded



diminutive axe-heads (Needham forthcoming) and only one, from Bush Barrow, is of more regular size.

The combination of trapeze shape, low flanges and lack of stop bevel is extremely unusual among insular axe-heads and has led to identification of the Wilsford G58 one as of Armorican style (Needham 1979, 274; 279, fig. 9.2). The metal composition of the Wilsford example is unfortunately not sufficiently diagnostic to say it must have been manufactured in north-west France (Table 13.1).

Figure 13.2: Wilsford G58. Stone battle-axe (© Stuart Needham)

### Bronze double-pronged object

This fork-like object with two twisted prongs is 150 mm long, 112 mm wide and 6.3 mm thick at its maximum (Fig. 13.3). When found, the slightly flanged tang (23 mm wide, 1.5 mm thick) was complete with an arched butt and four holes in a diamond formation, one containing a long rivet (lost; Hoare 1812, pl. xxix). The prong bases turn almost through right-angles to meet the tang in an expanded zone enclosing a rectangular aperture (27.5 × 12.5 mm), the margins of which are decorated on both faces with a row of stroke-filled triangles. The bottom edge of the aperture bears a tight lattice design framed by transverse groove bands. Originally, three interlocking metal rings dangled from the rectangular aperture, but the closest one has since broken, thus detaching the others. They have sub-D sections with diameters ranging from 19 mm to 22 mm.

The tips of both prongs are missing, possibly since burial, and another break depicted by



Object	Cu	Sn	Pb	As	Sb	Ag	Ni	Bi	Co	Zn	Fe	Reference
Axe	89.8	11.0	0.196	0.029	0.012	0.011	0.028	0.009	0.001	0.007	0.017	B M Lab., BBA 1003; unpublished*
Prong tang	87.3	12.6	0.037	nd	nd	<0.005	<0.01	<0.004	–	–	0.0078	Britton 1961, 48 no. 52
Prong ring	91.6	7.0	1.09	nd	nd	0.02	0.28	0.0058	–	–	0.047	Britton 1961, 48 no. 53

nd element not detected; – element not sought; \*see Hughes *et al* 1976 for analytical method

BM = British Museum

NB the ring sampled appears to have been that attached to the aperture, now broken; it is totally corroded metal which may affect the accuracy of the analysis

Table 13.1: analyses of the bronze objects from Wilsford G58 (figures as percentages)

Crocker (Hoare 1812, pl. xxix) has since been glued. Both prongs are gently tapering, squared bars which were twisted clockwise. As well as curving inwards towards the tips, they bend gently in profile. The only significant wear is around the inner edges of the rectangular aperture, being most intense at one corner (left-hand in Fig. 13.3b) and less so at the other, positions where the first ring would come to rest if the object was tilted to one side or other. By contrast, there is very little wear of the external angles flanking the crosshatch decoration, although the greatest relative wear is at the same corner. The wear pattern makes it clear that the object was not primarily shaken with prongs pointing upwards. Instead, the rings were in motion when the shaft was more horizontal with the prong ends curled upwards; moreover, the head was tilted more often clockwise (right-hand prong lowered), than anticlockwise.

This is a unique object for the period and various views have been entertained as to its function, including standard mount (Smith 1921; Ashbee & ApSimon 1954), exotic vessel handle (Grinsell 1957, 212), horse goad (Piggott 1973, 361) and flesh-hook (dismissed in Needham & Bowman 2005, 117). Metal composition for the main object (Table 13.1) is consistent with, in particular, Period 3 metalwork. Moreover, the low-flanging of the hafting plate is a classic feature of axes of the period, as seen in the associated example.

The flanged-and-riveted tang suggests the instrument was mounted at the end of a handle or shaft. While it would have made an impressive standard mount (even if the Anatolian parallels sought by Ashbee & ApSimon are extremely tenuous), the wear pattern does not support such a function. Piggott's goad hypothesis is more appealing;

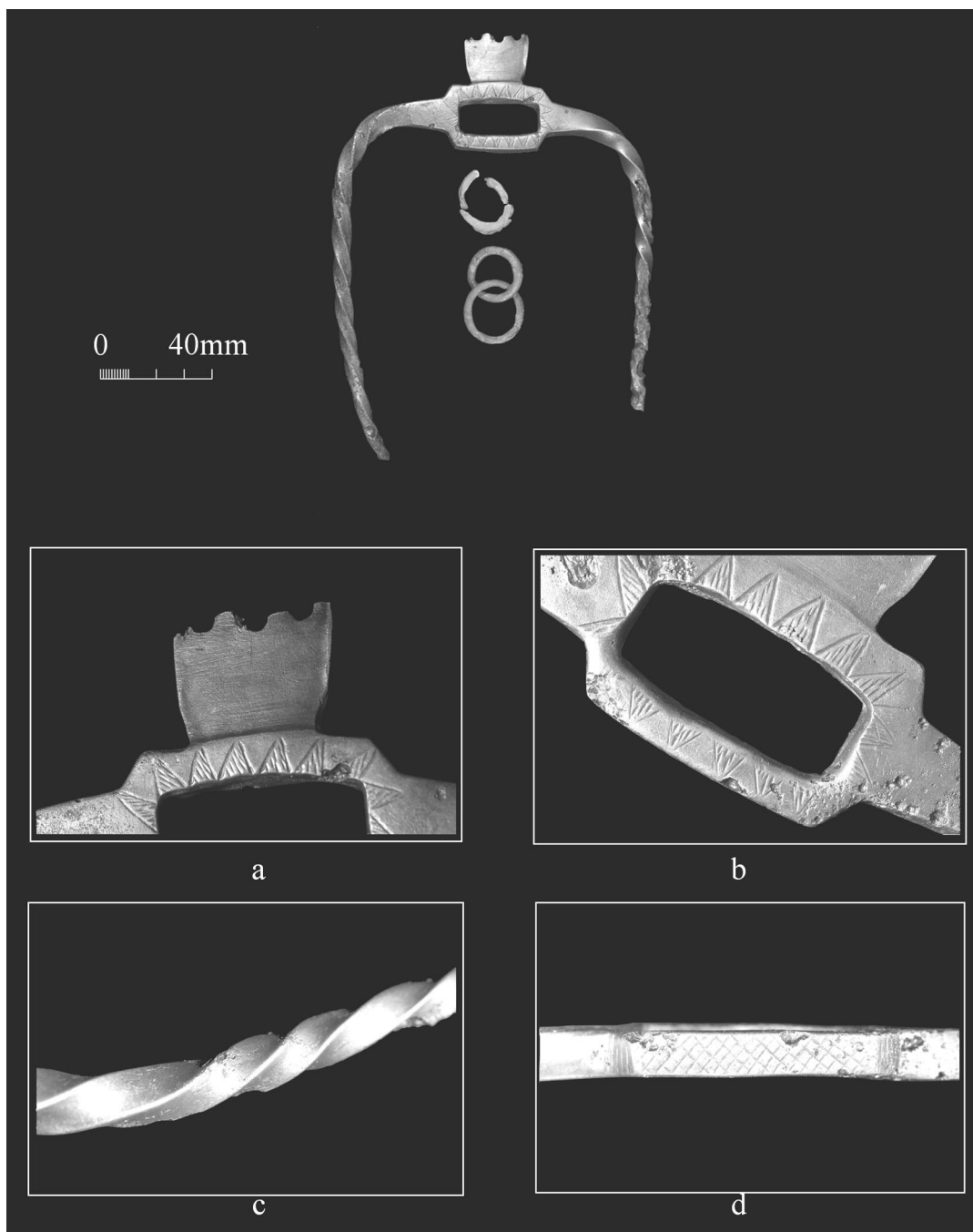
the rings would have rattled whenever it was brought down on the animal's rump and soon the beast (perhaps draught ox rather than horse) would have associated noise with action. However, it appears that the prong tips were not normally curling downwards in use as would be expected of a goad. It may be presumed that this was a ceremonial or ritual version of instruments more generally made in perishable materials and thus it may no longer have literally served the original function of the prototype.

This is one of the earliest examples of bar twisting, a technique seen otherwise on Early Bronze Age pins (eg, Gerloff 1975, 249–51) and some other continental ornaments (eg, Briard 1984, 212–5). The interlocking rings represent another exceptional technical achievement at this date, requiring either *cire perdue* casting, or, conceivably, sequential casting-on in a tricky procedure using bivalve moulds. Again, it can be paralleled on a bronze pin, that from Collingbourne Ducis G4 (Ashbee & ApSimon 1954; Annable & Simpson 1964, 47, no. 193).

## Discussion

We have little choice but to accept that this fascinating grave group accompanied a mature male, for the bones were returned to the soil. The fact that the artefacts were all apparently at the feet brings to mind many other cases where the grave goods were in bundles and perished organic containers may reasonably be inferred. However, the evidence is in favour of both the axe and the pronged instrument having been hafted at the time of burial, so the finds were unlikely to have been all in a single bag or box.

Dating the Wilsford G58 grave is not absolutely straightforward. The bronze axehead, had it been of insular type, would likely have



*Figure 13.3: Wilsford G58. Bronze double-pronged object (prongs curling away) and details showing: a) lateral grinding striations on the tang; b) decoration around the rectangular aperture and wear concentrated around the outer bar; c) striations and/or stress fissures on twisted prong; d) relatively unworn outer edges of cross-hatched bar of the rectangular aperture (© Leverhulme project and Wiltshire Heritage Museum)*

been phase specific; but the Armorican style it represents cannot as yet be so narrowly dated. The battle-axe probably gives the best indication; it is certainly not one of the early types with Period 2 associations, and most battle-axes deposited in graves in Period 4 are quite different. A date in or close to Period 3 (c. 1950–1750/1700 BC) is suggested and is entirely acceptable for the other objects, as well as the metal compositions of the bronzes.

There has often been an assumption in

the past that the grave goods in a particular grave should somehow be coherent – that the individual objects interrelated so as to constitute a meaningful ‘set’ in terms of function, status or cultural affiliation (eg, Smith & Simpson 1966; Burgess 1980, 100–3). The notion of coherence has been undermined more recently by attention being given to the role of mourners and the potential for funerary offerings to have varied backgrounds (eg, Barrett 1994, Chapter 5). These ideas are

important, especially in cases such as Wilsford G58, where the composition of the group is effectively unique and, moreover, connections between the surviving objects are far from obvious. In fact, unique combinations are not unusual amongst well furnished graves.

Such groups are characterised more by their diversity than by functional coherence. For the Clandon Barrow group (not certainly associated with a body), we previously highlighted the eclectic and partly exotic nature of the materials present, as well as the widespread connections implied by the objects (Needham & Woodward 2008); it seemed that the object group was an attempt to represent the community's world reach. Diversity is certainly also a feature that stands out for Wilsford G58 and, although most of the materials would not normally be considered to be exotic, there is a case for most or all having had unusual functions or connotations. Therefore we shall examine the objects as diverse representatives of different cross-cutting themes that might have been important to the burying community. Four themes will be considered – material, origins, functional connotations and sensory attributes.

Setting aside the obvious presence of three basic material categories (metal, stone and bone-type), there is perhaps a more telling differentiation among the four bone-type objects. The plate is made from *Bos* (cow), the tusk from *Sus* (pig), the handle from *Cervus* (deer) and the tube from *Homo* (human). The pronged instrument could reinforce the *Bos* connection, for it is tempting to see the prongs as schematic representations of cow horns. This could tie in with the miniature horned pendant from nearby barrow Wilsford G8 (Case 2003, 175; Needham *et al.* 2010, 28–30, fig. 12a).

The places-of-origin theme offers three obvious divisions. The local is most evident in the sarsen of the grooved block and the regionally specific emblem provided by the bone plate. The raw material of the block would have conveyed much to Early Bronze Age societies. Monuments such as Stonehenge and Avebury are only the most obvious evocation of the stature of sarsen, and recent studies have highlighted both the importance of smaller sarsens within monumental contexts and the symbolic use of sarsen as a material for artefact production (Field

2005; Pollard & Gillings 2009). By contrast, the greenstone of the battle-axe should have a distant origin, probably in the south-west peninsula; intriguingly, most parallels for its morphology are from other distant regions to the north and in Ireland. Meanwhile, the style of the bronze axehead acknowledges connections across the Channel, even if it was not actually made there.

Functional connotations are more varied and need not be set in opposition to one another. Various craft-working may be implied by the grooved stone block, the bronze axe and the presumed tool handle of antler. Such stone blocks are well suited to the finishing of moderately thick shafts with diameters seen, for example, to be typical among perforated battle-axes and mace-heads. Ornamental trappings could be present in the form of the boar's tusk and bone rectangular plate. The form of the latter might well derive from that of wristguards. It is now accepted that wristguards made from stone may often have been ornamental appendages stitched to functional organic wristguards (Woodward & Hunter 2011). The small plates may reflect this ancestry.

The bone tube for producing sound, the battle-axe as sceptre and the pronged instrument as a ceremonial goad could all very easily have been elements of regalia used by a ritual specialist. The bone tube recalls the thighbone trumpets, or *kangling*, used in the Buddhist world during death ceremonies (Vinding 1982, 301). Examples, usually of 19th century AD date, are frequent in ethnographic collections. They often have metal mouthpieces attached and are decorated with leather binding. The sceptre and goad were likely also to symbolise prestige: the former being an in-vogue mark of authority at this time, the latter making a link to the highly valued asset of the animal-pulled plough or cart.

There is the obvious possibility of a specific ancestral reference deriving from the human bone used for the tube. Indeed, the project has revealed various other objects made from human bone from Early Bronze Age graves (Woodward *et al.* in prep.); perhaps they were made from bones which derived from older barrows, or belonged to known ancestors. In either case the material might have been imbued with immense spiritual power, which was thus transferred to the cosmological and social value of the objects in question.

Finally, we might consider whether sensory aspects of the objects played a part in their choice. In this group colour is not particularly varied, but the main material categories do provide differentiation in textures and relative coldness (bronze, stone) or warmth (bony substances) to touch. It may also be noteworthy that at least two of the objects seem to have been designed to create sound – the bone tube as a pipe or sound box, the pronged instrument as a rattle.

We cannot possibly know whether the selection of the objects for the Wilsford G58 grave was consciously influenced by all or any of the themes outlined, but by exploring them we gain a better appreciation of the diversity of the assemblage from various perspectives. These objects do not look like a ‘set’ with a single interpretation, unless, perhaps, they were unified by being the accoutrements of a religious specialist. It is certainly feasible that the material equipment needed for varied rituals might be a combination of pieces purpose designed for the conduct of specific rites and others which were simply co-opted from the more normal repertoire of material culture but given a special role.

The presence of an Armorican style axe-head invites speculation that the individual may have originally come from that region. A single distinctive artefact type is not in itself sufficient evidence, but in the case of Wilsford G58 it might be supported by two features: the position of the axe at the feet, which is unique amongst the small number of funerary bronze axes in Britain (Needham *et al.* 2010, 19), and the south-easterly orientation of the body. Both these features seem to be the norm in Armorica, albeit based on few surviving skeletons because of predominantly acidic soils (Briard 1984, 54–7). Nevertheless, the eclecticism of the Wilsford G58 ensemble, although unique in its specific contents, seems perfectly at home in Wessex. In this respect it conforms to local traditions, but this still could have been applied to a foreigner who became resident.

In this paper we have been able to focus on a prehistoric individual who was distinguished by diverse offerings – we can detect distinction in diversity. We offer our thoughts on this connection in gratitude to one who has provided a multitude of diverse and inspirational offerings to prehistoric archaeology.

## Acknowledgements

As ever, we are grateful for the unstinting support of staff at Devizes Museum – Paul Robinson, David Dawson, Lisa Brown and Kerry Nickels – as well as for advice from various project colleagues. John Hunter willingly consented to this publication of some of the project findings ahead of the main Leverhulme volume.

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## Extended and Condensed Relations: bringing together landscapes and artefacts

*Chris Gosden*

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*Richard Bradley has written on a number of themes in prehistoric archaeology; two key subjects being field systems and land divisions, and artefacts, especially bronze ones. But how do we begin to bring together objects and landscapes? Here this question is addressed through the identification of two different cycles of change in the British Bronze Age and Iron Age. The first concerns the extended community mobilised in the large scale work of ditch digging in the creation of fields, linear boundaries, and enclosures. The second concerns the condensed relations found in artefacts, where the large numbers of relatively plain objects of the Bronze Age disappear in the Early Iron Age to reappear after 400 BC in new elaborate ranges of form and decoration.*

*It is argued that these two sets of cycles, the extended and the condensed relations of landscape features and artefacts respectively, are linked through the notion of substance – a concern with the elements of earth, fire and water. They also derive from changing sets of relations: those of the Middle and Late Bronze Age being relatively solid, between more fluid forms in the preceding Neolithic/Early Bronze Age and the succeeding Iron Age. In the more localised world of the Iron Age, people were able to negotiate social positions through varied objects and landscape types in a manner that was much more difficult in the Bronze Age.*

What is the difference between a field system and a bronze axe? This might seem like the start of a bad archaeological joke, but it is a question I want to take seriously here. To give the punchline away immediately I would say that the field system represents a set of extended social relations, so that an area of fields cannot be created or effectively worked by an individual person but only by a group in cooperation. The field system is the group writ large. The axe, on

the other hand, is a condensation of relations holding within it all the people and practices who contributed to mining the copper and tin, smelting each metal (which in turn needed wood, clay and various forms of equipment), alloying the metals and working them into the axe, which again required a variety of actors and materials. The axe a person held in their hand miniaturised these relations, which might not have been known in detail to the user but

would have been appreciated at a general level nonetheless. The power of the axe was to make many relations present in a highly condensed form; the fields require an extended form of group work. Both the axe and the fields remind a single person that they exist mutually, through relations with others. The forms that material things take do not just reflect these relations, but help create them in various ways. Mutuality of relationships exists between people and things, so that the latter have requirements of us (Gosden 2008). Importantly, condensed and extended materialities have their own sets of temporalities. Axes change typologically, although an individual axe can endure. Field systems change partly of their own accord, as ditches silt, banks erode and fences collapse. But pulses of human action renovated old systems, made them bigger or allowed decay to take its course. In the latter case deliberate human action is required. The condensed nature of human action puts an emphasis on form. Typological change happens through a process of drift in form that we can recognise, but still do not understand.

Richard Bradley, as we all know, has written on a number of themes in prehistoric archaeology. Two key subjects have been field systems and land divisions on the one hand and artefacts, especially bronze ones, on the other. I have been greatly influenced by the key point Richard made about the need for an holistic view of deposition. Rather than consider the deposition of metal in graves, or rivers, or dryland hoards in isolation, we should think about them as a linked system, so that it was possible that when the rate of deposit in one area went down, it would rise in another (Bradley 1998; 2005). Recently Richard, in two articles with David Yates, has provided considerable new nuance to his work on deposition, linking the types of individual artefacts and the composition of hoards with the locations in which they were deposited on either land or in water. In the area between the North and South Downs in south Hampshire, Sussex, areas of Surrey and Kent (Yates & Bradley 2010) during both the Middle and Late Bronze Age the uplands had hoards in a repeated relationship with springs and fresh water in pools and streams, as well as with settlements and burnt mounds. On the west Sussex plain there was a recurrent association between hoards and scatters of flint (often

burnt), settlements, and field systems (Yates & Bradley 2010a, 66). Broader patterns are also perceptible in that there appears to be less bronze on the chalk uplands and a greater preponderance of weapons along the river Wey on the edges of the Thames basin. In a second article Yates and Bradley (2010b) develop the idea of waterscapes. Using detailed reconstructions of changing wet and dry areas in the Fens, Yates and Bradley attempt to understand the links between varying artefact types and the sorts of water they were thrown into. Whole weapons (rapiers and swords) and more occasional ornaments were thrown into rivers (*ibid.*, 409). Fragments of swords were deposited as hoards on dry-land (*ibid.*, 412), as they were in many parts of Europe. Hoards, especially of weapons, were found in bogs or pools away from the main rivers and metalwork was also found near causeways across the fen, the most famous of which is Flag Fen. Some connections were also seen between hoards and field systems – the enormous hoard of Isleham, numbering some 2600 items was probably in a ditch terminal and may have been near a burnt mound (*ibid.*, 411). Proximity to burnt mounds and fields was found in other parts of the Fens, but may not have been such a strong association as in some other parts of the country.

Taken together, these two articles indicate both a commonality of pattern across large areas of north-western Europe (the deposit of whole swords in rivers and sword fragments in dry-land hoards) and also a set of local variations which gave values to landscape and waterscape in ways that underpinned the local community. At an empirical level both articles draw on material in the Portable Antiquities Scheme and the results from developer-funded archaeology which together allow for a new richness of appreciation of landscapes and artefacts which has been a feature of Richard's recent work (Bradley 2007).

David Yates (2007), partly under prompting from Richard Bradley, has recently presented an overview of findings on field systems in southern England, most of which have been investigated due to developer-funded archaeology. Field systems come into two basic types: lowland ones made up of ditches, with other barriers, principally hedges and fences; highland systems on the chalk where lynchets are formed as soil moves down hill due to ploughing, collecting along barriers (we should

also be aware of other highland field systems, the most famous of which are the reaves of Dartmoor: Fleming 2007). Most of the recently and extensively excavated field systems are lowland ones, as this is where the vast majority of development has occurred. Early work on so-called Celtic fields started mainly on upland areas, which are now comparatively less well known. The most striking point Yates makes is about chronology. Calling fields 'Celtic' gave them an implicit association with the Iron Age, due to the thought that the Celts arose during the Iron Age. Collating the dating evidence for the ditched systems (not an easy task) Yates (2007, tables 3–11) realised that very few dates fell within the Iron Age and that most ditches were in active use in the Middle to Late Bronze Age (c. 1500–800 BC). A further pulse of ditching is found in Late Iron Age and early Roman periods when some systems were created as extensions of the Bronze Age layouts and some were new (Booth *et al.* 2007). Few ditches were open and active between 800 and 150 BC (Bradley & Yates 2007). Whether the same chronology applies to downland systems is much harder to tell due to the paucity of excavation and dating on these sets of fields.

Yates's reading of this evidence leads him to conclude that the Bronze Age was a period of growing social inequality, so that the establishment of field systems was due to an intensification of agriculture, which fed into competitive feasting, and the exchange of fine metalwork between Britain and the continent. Later Bronze Age ringworks, such as those at Mucking, Springfield Lyons or Taplow, were centres of metal production and elite consumptive activity. 'It cannot be doubted that artefacts and architecture confirm that social inequality characterised these farming regimes' (Yates 2007, 123). Here is not the place to going into a critique of this model and while I am doubtful of the hierarchical aspects of Yates's views, it is more the emerging idea that no field systems existed in Early and Middle Iron Age Britain that I wish to discuss.

First of all, ditches represent a labour-intensive and recognisable division, but on their own they would not have been a barrier for the movement of cattle, sheep, horses, pigs or people. Truly effective barriers derived from fences and hedges in combination with ditches (Lambrick 2009, 37). Many of

the double ditches have been interpreted as creating narrow droveways for sheep especially. Evans (2009, 45, 245) has questioned this, seeing instead that the upcast earth from the double ditches was used to create a bank between the two in which a hedge could be planted. Phosphate analysis in a number of the double ditched systems in the Fenland does not indicate movement of animals and both pollen and the recovery of hedge wood provide some support for the existence of hedges. What is clear is that we need better methods for spotting and understanding hedges. The recording of evidence for fences is now becoming more routine (Evans 2009, 45). The new Yates's model that ditched systems were set up in the Middle Bronze Age to be extended in the Late Bronze Age and abandoned in the Early and Middle Iron Age may well be true to the extent that the ditched component of these systems had such a history. It does not follow that the field systems themselves went out of use, as the hedges and the fences may still have been maintained (creating a landscape that looked much like that of the pre-War era). Indeed positing an absence of Iron Age fields raises the problem that mixed agriculture clearly existed in the Iron Age, as shown from abundant samples of carbonised grain and of animal bone (Bradley & Yates 2007, 99–100). We can resolve the paradox of abandoning fields while practicing a stable mixed agriculture by concluding that it was the digging of ditches which was abandoned and not the fields themselves, which continued to be bounded by hedges and fences, as well as possibly divided up into larger blocks of landscape through pit alignments and linear ditches (*ibid.*, 98–9). More work is needed to understand the full range of land division within the prehistoric landscape and our new richness of data requires novel methodologies. Land divisions of all types are notoriously difficult to date, as they often lack artefacts or charcoal. Indeed dating may relate to the last silting of the ditches rather than when they were dug and it is only through careful attention to layering within ditches and/or recuts that a more varied history is possible (Bradley *et al.* 1994; Cunliffe & Poole 2000).

New work on field systems questions our modes of building chronology for varying types of site. We are still trying to date field systems as if they were stratified settlement sites with sequences of layers containing successive



artefact assemblages. Field systems do not develop as discrete sites and phases, but pulses of activity best understood through average densities of artefacts and some spot dates from within ditches or under banks. Evans (2009, 8, tables 1.2 & 3) has been advocating a methodology which looks at dates of use of areas enclosed by field systems, which are somewhat generalised, but may allow for rather coarse, but helpful, chronological distinctions to be made. Here is the important beginning of a new methodology that needs developing. In thinking about field systems we can now conclude in a preliminary fashion that between the pulses of ditch digging fields may well have stayed in operation, but in a manner which is less obvious archaeologically. This is a most important conclusion if true, as it indicates a very different attitude not just to the fields themselves, but also modes of community building through coordinated labour.

Richard, as we saw above, has advocated a more holistic view of deposition. The same is true of ditch digging and bank construction. From the Neolithic onwards people are digging as gangs in the landscape to transform it. This work shifts in emphasis from one period to another and as effort is expended on one class of features it may emphasise others less. Looking at communal digging from the Middle Bronze Age onwards we can see that effort was first expended on ditch digging to enclose fields and settlements and this continues into various enclosed ringworks and hill top enclosures in the Late Bronze Age, in addition to extended field systems. By contrast, in the early Iron Age ditch digging to create fields stops (or was much less common), but effort was put into the creation of large numbers of hillforts and large-scale linear ditches and pit alignments. In the Middle Iron Age there are fewer hillforts, but those that continue have more complex ramparts, ditches and entrances (Cunliffe 2005; Sharples 1991; 2010). In the Late Iron Age many hillforts are given up and effort switches back to field systems and large dyked systems around Late Iron Age centres such as Colchester or Chichester (Creighton 2006). It is impossible to ever give realistic figures about the relative amounts of labour that went into the digging and construction of varying types of feature from the middle of the 2nd to the end of the 1st millennium BC. However, there does seem a fluctuation

from fields and settlement enclosures between 1500 and 800 BC, with hillforts then taking over as the centres of activity with the emphasis reverting to fields and ditches from around 100 BC onwards.

If field systems and hillforts are extended and materialized sets of social relations then how did their modes of community creation differ? Hillforts vary a lot, belying the singularity of their name. However, some did become centres of population. This represents a key innovation: this was the first time that more than a few households lived together in Britain, creating a human community of many tens or possibly in excess of 100 people. In our over-crowded world it is hard to appreciate the significance and possible difficulty of a large community coming together for the first time. The ramparts and ditches describing the hillfort are coming to seem more than mere physical barriers. In cases such as Maiden Castle (Sharples 1991) and Segsbury and Alfred's Castle (Lock *et al.* 2005; Gosden & Lock 2007) more regular work went into ramparts than was necessary for maintenance and foreign material was incorporated into the banks, perhaps helping to map the region in terms of physical connections. Such work did not just enclose the community, it helped create it.

If we can see cycles of change in the work of digging and construction which indicate varying ways in which the extended community was created, is it also possible to discern cycles in which relations were condensed into metalwork? When thinking about Celtic art (dating to between roughly 400 BC and AD 100) in a longer term context, Duncan Garrow and I have come to see the contrast between Late Bronze Age metalwork use and deposition and that in the Middle Iron Age as one between quantity and quality (Garrow & Gosden in press). In the Late Bronze Age large amounts of material are deposited, sometimes in large hoards of identical items such as socketed axes and with only occasional items, such as swords or ornaments, marked by unusual qualities of form or decoration. The Tower Hill hoard is a case in point with its 22 complete Sompting axes, 24 axe fragments and a range of other rings, strips, rods and scrap (Coombs *et al.* 2003). These axes were very similar to one another and only the skilled eye can detect differences. The decoration on the axes is subtle, being made up of ribs and

pellets, sometimes converging into chevrons and varying from one face of the axe to another in some cases. These decorative forms are seen as fairly rich by the standards of the British Late Bronze Age. The hoard was found in a circular gully, probably of a house and may well have been produced very locally to the site of deposit, indicating that the material never went into circulation but was deposited soon after making (Coombs *et al.* 2003, 222). In comparison to other European traditions of Bronze Age metalwork British products were plain: 'one cannot escape noticing the lack of sophistication in the (Atlantic) metalwork, it is plain and straightforward – there is none of the stylistic artistry of the Nordic tradition or the technical mastery of the Urnfield specialist workshops. Quantity rather than quality ... seems to be the rule' (Kristiansen 1998, 145). We would see the same contrast as pertaining between the British Bronze Age metalwork and that of the Middle Iron Age onwards, this latter material being known as Celtic art.

Having undertaken the first systematic radiocarbon dating programme on Celtic art (Garrow *et al.* 2010), we would date the first appearance of that art to around 400 BC and it continues beyond AD 100. Between deposits of hoards like Tower Hill at the very end of the Bronze Age around 800 BC and the start of Celtic art there seems to have been little metal use in Britain. In Britain after around 800 BC the deposition of bronze declines markedly and this is true of hoards, river finds, and settlement evidence (O'Connor 1980; Needham 2007), there being few burials at this time. The deposition of iron does not become common until 400 BC or later. Looking at one of the best understood material culture sequences from Danebury hillfort, the number and weight of iron objects only increases in ceramic phase 6, which is currently dated as starting in 400 BC (Salter & Ehrenreich 1984, figs 10.4 & 10.5). It might be that there is little iron in evidence before this date because it was scarce and being recycled. However, the data on production that we have, which is albeit fairly slim, indicates specialist smelting and smithing sites become more common after 400 BC (Salter & Ehrenreich 1984, 151). Looking at deposition, Hingley (2006) has found a considerably larger number of iron objects being deposited after the 5th century BC.

From around 400 BC the assemblages

known as Celtic art also start to be produced in bronze, iron and later gold and silver. This happens as a revaluing of metals, so that as iron becomes common so too do these other metals. The corpus of material we have come to call Celtic art is made up of horse and chariot gear, human ornaments, swords, shields, mirrors, tankards, helmets and figurative objects. This miscellaneous group is picked out by a relative complexity of form and decoration from other contemporary items and compared to most British metalwork that precedes it.

To gain an initial impression of the nature and significance of Celtic art, let us contrast it with earlier periods of Bronze Age metalwork. Between the Middle Bronze Age metalwork known as the Acton Park phase until the Early Iron Age Llyn Fawr assemblages metalwork behaves typologically. Needham *et al.* (1998) have demonstrated through a radiocarbon dating programme that Bronze Age metalwork phases each last around a century, changing in a regular typological manner. Most of the material we know as Celtic art does not change in an easily understood typological manner, although some aspects of the fine metalwork assemblage, notably fibulae and coins, do. For instance, terrets (or rein rings), the most common of all Celtic art forms are not easily typed, nor are their changes easily understood or charted. Each new worker dealing with terrets comes up with a slightly different grouping to those previously created (compare Fox 1958; Spratling 1971; Palk 1992; Macdonald 2007). This is due to an emphasis on variety and difference on the part of the metalworkers of the later Iron Age and not a function of small sample sizes or taphonomy. The large assemblages of similar objects, principally axes and spears from the Ewart Park phase (Needham 2007) can be contrasted with the mixed hoards of the later Iron Age.

When comparing the Bronze and Iron Ages not all is difference and there are echoing resemblances between the Wilburton, Ewart Park, and (to some degree) Llyn Fawr and the later Iron Age. From the Wilburton phase onwards offensive and defensive weaponry deriving from the Middle Bronze Age, is joined by horse gear, such as cheek pieces, phalerae and slightly enigmatic double loops which might be terrets, as well as nave rings (O'Connor 1980). Personal ornaments, such as pins and bracelets are rare. In the following

Ewart Park phase pins diversify in form and increase in numbers, to be joined by finger and neck rings. Tweezers and razors are more in evidence. Horse gear has also diversified with new and continuing types. Evidence of attention to the human body and of horses is still found in attenuated form in the following Llyn Fawr phase, before the evidence fails.

This mix of types, including horse and chariot gear, weaponry and personal ornament is found again from the 4th century BC, an interesting return to some of the tropes of the Bronze Age. But in addition to this echo of earlier ways is a massive difference in form and decoration. Bronze Age metalwork is decorated with studs, rivets, simple geometrical patterns or ribs and pellets. This cannot compare in its complexity to the decorations found on Celtic art, which is aimed at quite different effects. One only needs to compare the Snettisham torcs (Stead 1991) with any of the neck ornaments of the Bronze Age to see quite a different set of sensibilities brought about by a desire for complexity. A Snettisham torc requires considerable skill from the maker, but also from the viewer whose senses are educated and skilled in quite new forms of appreciations. To say that Iron Age metalwork is more complex and the product of greater skill than that of the Bronze Age is not to make an argument for progress or to denigrate the products of the earlier age. I wish to make a more cultural point, which is that metalwork had a different role in the transformations linking people and the powers of the world in the Iron Age than it had had previously. Relationships in the Iron Age were more fluid and negotiable than in the earlier period. Metalwork was not just more complex, but also ambiguous, in its decoration which was open to multiple interpretations. This decorated world of qualities in metal work, which starts around 400 BC, persists in changing forms through the Romano-British and early medieval worlds. It contrasts in many ways with that of the late Bronze Age, which nevertheless developed the types and assemblages that carry on for many centuries in elaborated form.

## Discussion

I have identified two different cycles of change. The first concerns the extended community mobilised in large scale work of ditch digging

in the creation of fields, linear boundaries and enclosures. My feeling, which needs more demonstration, is that fields still exist in the Early and Middle Iron Age, it is the ditches which are not maintained, boundaries being supplied by fences, hedges and linear features. The second concerns the condensed relations found in artefacts where the large numbers of relatively plain material of the Bronze Age disappears in the Early Iron Age to reappear after 400 BC in new elaborate ranges of form and decoration. Iron does not replace bronze, but both become rare together to re-emerge again in tandem (together with gold and silver in lesser amounts). Iron repositions bronze rather than replacing it. Are these two sets of cycles, the extended and the condensed relations, in any way linked?

I have come to see the Middle and Late Bronze Age periods as relatively solid sets of relations between more fluid forms in the preceding Neolithic/Early Bronze Age and the succeeding Iron Age. A huge amount of effort went into fixing the community in terms of digging field ditches, or the creation of reaves on Dartmoor or of lynchets on other upland areas. The digging of ditches seems to be about more than creating a barrier, which can be done at least as well through building fences or tending a hedge. The labour involved brought the group together, not just in the initial creation of ditches but also through their regular maintenance and cleaning out. The fixed typological forms of bronze artefacts may be a response to the same desire to regularise and fix. Bronzes are created by and help create an international world linking Britain to both Ireland and continental Europe. The openness and potential instability of this wide world were held in check to some degree by standardising bronze artefacts and maybe also the human relationships attached to those. As we have seen Yates and Bradley (2010a; 2010b) are starting to uncover the full rule-bound nature of deposition, where only the correct combinations and forms of things could be deposited by springs or in major rivers.

The more localised world of the Iron Age may have changed the tensions felt by communities which needed to put less effort into defining the landscape through joint labour or to orientate themselves around metal items of similar type. Life changed in the Iron Age, but there is still much inheritance from the

Bronze Age. Iron, after all, was a Bronze Age invention and many of the forms of metal items in the Iron Age derived from the Bronze Age as we have seen. However, once metal artefacts came back in number after 400 BC, they occur in much greater profusion of types and decoration than previously. Perhaps people were now able to negotiate social positions through varied objects and landscape types in a manner much more difficult in the Bronze Age.

What links landscapes and artefacts in both periods is the notion of substance. Immanent in many discussions is the possibility of a concern with the elements of earth, fire, and water (and possibly air?). Metal could be a mediating set of substances here. Metal ores are taken from the earth, processed in various ways through the use of fire, used in complex manners and then deposited in earth or water, sometimes having been altered by fire prior to deposition. Yates and Bradley's recent work on hoards is starting to show the complicated protocols that might have existed for what was deposited where – whole swords in rivers as against sword fragments in dry land hoards, for instance. The work of Brück (1999; 2004) has focused on the transformation of bodies and materials through fire and other means, linking the domain of the body into that of pottery and metal, domains that we are inclined to keep separate. The human life cycle from birth to death may have seen various echoes or parallels in the making, use and deposit of artefacts. In the world of substances, bronze might have had a key linking role – originally from the earth, transformed by fire, it could shift from a solid to a liquid and back again – so setting up connections between three of the four elements.

Once again, many of the Iron Age tropes may have occurred first in the Bronze Age and were re-organised in the later period. A major innovation was the new prevalence of iron, which set up a new set of relations and modes of transformation. Iron came from the earth and returned obviously to the earth through rusting and, although it was worked by heat, never attained a liquid state. The slow adoption of iron may not have been due to difficulties of obtaining or working it, as iron was relatively widely available and knowledge of how to make iron artefacts long predated the start of what we define as the Iron Age.

Hingley (1997; 2006) has written about the possible links between iron and fertility, as well as the habit of depositing iron in hillforts and in boundary ditches. Iron participated in cycles of creation and decay in quite a different manner to bronze and did not replace bronze in any real sense, but rather extended the range of substances and their uses.

The temporary cessation of ditch-digging to create fields occurred in the Early Iron Age when both bronze and iron were still uncommon. Ditches were used to construct linears and to enclose settlements of varying sizes from that of the individual household to a hillfort. Where hillforts had dense internal occupation (and not all did) they constituted communities of a very new type, in which relatively large numbers of people lived together. The creation and maintenance of ramparts and ditches were most intimately linked with that of the community. As the Middle Iron Age unfolded, in the period after 400 BC, iron came to be deposited frequently in hillforts, partly as currency bars, but also as sword fragments, with whole swords still being deposited in rivers in southern Britain.

We can see a complex set of shifts taking place as the Bronze Age gives way to the Iron Age in the uses of materials and in dividing up the land. These shifts do not represent a technological advance, nor necessarily a movement from a more hierarchical way of life to the relative egalitarianism of the Early Iron Age. Community, as ever, was an issue, but questions of relatedness did not just include people, but also the intimate relations between people and materials. Paradoxically, extended relations are local, being the group materialised through its joint, coordinated and repeated labour. Relations condensed into a single artefact allow the possibility of long-distance movement of these artefacts, creating and maintaining a skein of human relations, near and far. It is the interpenetration of the extended and the condensed which is important, which in turn necessitates linking settlements and field systems on the one hand with artefacts on the other.

The domains of landscape archaeology and artefactual analysis do not come together often enough and without such a linkage a more rounded and holistic picture of the past is missing. Richard Bradley's work represents an extended discussion of artefacts and



landscapes. His most recent discussions, making use of rich new data sets and looking at the place-making significance of hoards and single metal finds, indicates a new and intriguing set of possibilities for thinking about the past.

## Acknowledgements

I am very grateful for joint work and discussions with Duncan Garrow which have helped shape my views on metalwork; indeed it is now tricky to know what are my views and which came from Duncan. Similarly work with Zena Kamash has been key in helping shape my views of land divisions and we are now starting a large project on the history of the English landscape from the middle Bronze Age to the Domesday Book. This project draws inspiration from Richard Bradley, both due to his views on past land division and society and also because of Richard's pioneering use of the Portable Antiquity Scheme data and that from developer-funded archaeology. Chris Evans's recent writing on field systems and land divisions has been thought provoking and provocative.

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# Missing the Point: implications of the appearance and development of transverse arrowheads in southern Britain, with particular reference to *petit tranchet* and chisel types

*Rosamund M.J. Cleal*

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*The appearance of transverse arrowheads in the Neolithic of southern Britain was for some decades explained as a survival of Mesolithic practice. Although that explanation has long since been abandoned there has been very little consideration of this unarguably novel and little understood phenomenon. This paper seeks to highlight the appearance of these arrowheads and explores the possibility that their appearance was related to a sphere of interaction around the coastal areas of the English Channel and southern North Sea through which ongoing contact between southern Britain and the continent was maintained through the middle centuries of the 4th millennium cal BC.*

As an undergraduate at Reading in the 2nd millennium (AD, though increasingly it seems as remote as the Bronze Age), I was at first suffering from a delusion that I wanted to study medieval archaeology. It was Richard who first opened my eyes to the fascination of prehistory, a fascination that is as real to me now as it was then. It was also Richard who encouraged me to concentrate largely on material culture, and particularly ceramics, also a path which I have never had cause to regret. So it was an enormous pleasure to accept the invitation to contribute to this volume and to offer the following contribution. I feel, too, that it is appropriate that its subject is a type

of artefact which occurs in the assemblages I studied as part of my doctoral thesis, as I would like in particular to thank Richard for his support when I was a student, as well as for the many years of encouragement and friendship since.

## **Points of similarity**

The characteristic form of earlier Neolithic arrowhead, the leaf-shaped point, has received more attention perhaps than any later form, largely because of its role in the search for antecedents for the British Neolithic. Piercing arrowheads of similar form have been found

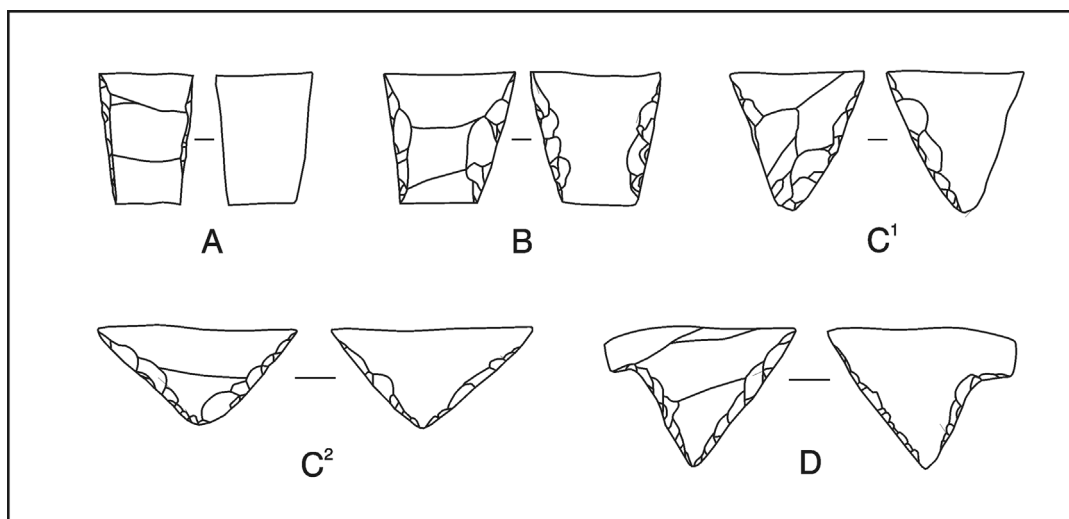


Figure 15.1 J.G.D. Clark transverse arrowheads types A–D (after Clark 1934)

at a relevant date for the beginnings of the British Neolithic in Belgium, the southern Netherlands, and northern France and were early recognised as relevant to the spread of Neolithic material culture to the British Isles (Childe 1931, 42–3). The realisation that the Neolithic period was much longer than was once thought, first as the result of radiocarbon dating, later by the use of calibration, and most recently by the application of Bayesian statistics, has led to the period now being seen as multi-staged and it is apparent that some continental features which were once looked for as relating to a contact phase, are now contemporary with a more developed phase of the British Neolithic. Interrupted ditch enclosures, and antler combs, for example, fall into this category. It now seems highly likely that what followed a ‘contact’ phase in the very early 4th millennium cal BC (say 4000–3800 cal BC) was in fact more contact. It seemed to me that with the publication of a major review of the Neolithic in southern Britain with more definition to the chronology than has been available previously (Whittle *et al.* 2011a) it was an appropriate time to review a question which had long intrigued me: when, and why, did the preferred type of arrowhead in use in southern Britain change so radically from the earlier Neolithic to the Middle and Late Neolithic. This has been a well-recognised phenomenon for many decades and was for a considerable time explained as a survival of Mesolithic practices (eg, Piggott 1954, 285–6), but since the lengthening of the Neolithic chronology little alternative explanation has

been offered, the majority of discussion of these forms being of typology and material culture associations.

Transverse arrowheads were recognised as a distinct form very early in the study of worked lithics, a hafted example from the continent even being illustrated in Evans’ *Ancient Stone Implements* (1897, fig. 344) and they have been the subject of considerable study ever since. In the 1930s J.G.D. Clark created a classification (1934) which is still in use, separating a simple *petit tranche* type from *petit tranche* derivative types (PTDs). (Here the definition of types follows that of Green (1984, 25): ‘transverse arrowheads’ referring to the whole *petit tranche* and *petit tranche* derivative series; ‘*petit tranche*’ to Clark’s type A (hafted with the cutting edge at right angles to the shaft; there are surviving non-British examples hafted); ‘chisel’ broadly with Clark’s types B–D (probably hafted as ‘A’) (Fig. 15.1); and ‘oblique’ to Clark’s types E–I (probably hafted obliquely to create a point).

In a review of the Neolithic period in 1974 Isobel Smith concluded that evidence for Mesolithic survival within these arrowhead types was not obvious, pointing out the preference for broad squat flakes in later Neolithic industries, quite different from Mesolithic practice. She also pointed out that the few cases of association or likely association between transverse arrowheads and Peterborough Ware were with Mortlake Ware and Fengate Ware, which were then considered later forms of that tradition (1974, 121), so even further distancing them from any pre-Neolithic survivals. Mike Pitts in 1978 took



a more determined line on the association between chisel arrowheads and Peterborough Ware, his figures heavily weighted by the collections from West Kennet Avenue and The Sanctuary, both within the Avebury, Wiltshire, complex of monuments, noting that oblique forms were more clearly associated with Grooved Ware (1978). Stephen Green's major review (1980; 1984) was the most in-depth investigation of arrowheads to date at that time (and remains so) and also tackled the subject of the origins of transverse types. While still suggesting that some survival of Mesolithic populations was possible, even over a thousand years, he did comment that he had 'removed the artefactual evidence – so-called *petit tranchet* derivative arrowheads and pebble maceheads – from the account', as he had come to the conclusion that neither derived from Mesolithic antecedents (Green 1984, 36). In that paper too he highlighted the rarity of *petit tranchet* arrowheads, then standing at around 300, with none from sealed Mesolithic contexts and many from surface sites which had also produced later lithics (*op. cit.*, 33). (Whittle *et al.* 2011b, 876, nearly thirty years later cite only one example subsequent to this in a relatively secure late Mesolithic context.) Healy, in a paper on eastern English assemblages in the same year highlighted Green's finding that chisel types were also associated with Woodlands style Grooved Ware, although oblique forms were commoner with the other sub-styles of that tradition (Healy 1984, 13; Green 1980, 235–6). A picture had emerged, therefore, of a range of transverse types, in which *petit tranchet* and chisel types were appearing with ceramic associations now recognised as belonging to the later 4th and early 3rd millennia cal BC, but the origin and use of those types were still obscure.

Even before Stephen Green's major review of British arrowheads it had been recognised that there were early, pre-Peterborough Ware, occurrences of transverse arrowheads, particularly of chisel arrowheads. Wainwright and Longworth, in their 1971 review of the Rinyo-Clacton Culture, noted that there were examples with earlier Neolithic pottery from Broome Heath (Wainwright 1972, 68, fig. 42, F55 and F66), Staines causewayed enclosure (in part Plain Bowl and part Decorated: Robertson Mackay 1987), Whitehawk (which

Clark 1934, 38 noted as the then only known association with Windmill Hill type pottery (it is type A: *petit tranchet*) and Hurst Fen (Clark 1960, 226, fig. 15, F48). To these can be added the causewayed enclosure at Etton, Cambridgeshire, where three chisel arrowheads were found in contexts with Decorated style (Mildenhall sub-style) pottery (Pryor 1998, 234). More recently, a tree-throw hole from Eton Rowing Lake has produced what Lamdin-Whymark interprets as a placed deposit which includes a chisel arrowhead, debitage from chisel arrowhead manufacture and earlier Neolithic pottery (Lamdin-Whymark 2008, 86, table 20) (Fig. 15.2) This is a weaker association than the others because tree-throw holes can clearly act as traps for material over long time periods, but the apparent placement of the material raises at least the possibility that the finds, including the plain earlier Neolithic pottery, were all associated and that it is another early occurrence of the type. In terms of date, Decorated Bowl, Plain Bowl, and South-Western style pottery are all noted as ceasing to be deposited by 3300 cal BC, some perhaps considerably earlier, in the causewayed enclosure dating project (Bayliss *et al.* 2011, 801, fig. 14.145, 803) (Fig 15.3). Dating at the enclosures which have produced chisel arrowheads in early contexts has only produced considerable ranges, even in the modelled versions of the chronology. The detail may be still obscure, but if a few chisel arrowheads were being made during the currency of Decorated and Plain Bowl, it is reasonable to investigate the potential sources of inspiration for this novel form at this early date.

Transverse arrowheads were recognised as common in Neolithic contexts in Europe by Clark (1934, 38) and Childe (1931), particularly in Brittany, northern France, Denmark, northern Germany, and other areas to the east. If, as appears likely from the pottery found with the early examples of transverse arrowheads in southern Britain, they are likely to have been deposited within the 'hey-day' of causewayed enclosures, and no later than around 3300 cal BC, then the middle centuries of the 4th millennium cal BC are critical if continental parallels are to be sought. Just as Whittle, Bayliss and Healy (2011b, 880) conclude, after an examination of the European evidence for interrupted ditch enclosures, that 'it can hardly be doubted that the general idea of enclosure construction in southern Britain was derived in some way from

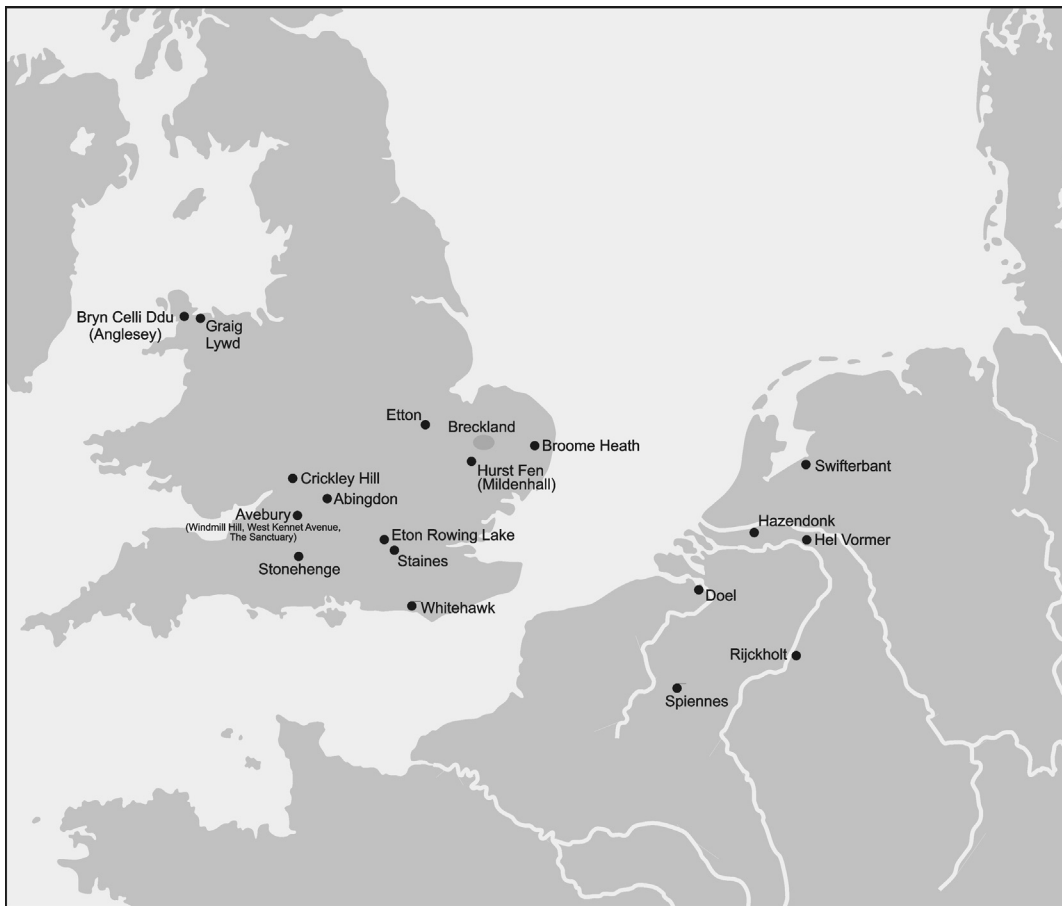


Figure 15.2: Sites mentioned in the text

the adjacent European continent', so it would seem perverse not to conclude that the idea of transverse arrowheads and the practice(s) they represented could also derive from areas where they were prevalent at the same time. More difficult, however, is to establish which areas those might be, as the contacts of the British Neolithic in the early stages seem likeliest with those areas which have piercing arrowheads.

Potential contacts with continental Europe, as suggested by the material culture of the middle 4th millennium cal BC, to, say, 3300 cal BC, constitute a rather 'mixed bag', but although individual instances may seem unconvincing there is some value in putting them together to see whether combined they are more persuasive. Transverse arrowheads, although predominantly found in areas to the north and east of the area with piercing arrowheads (and in Brittany) (Whittle 1977, 178, fig. 50, illustrating the northern Chasséen) do occur sporadically in the Netherlands and in Belgium. At Doel (Antwerp harbour), for instance, Belgium, transverse arrowheads are

known in a Michelsberg context (Crombé & Sergeant 2008, 78, 79, 82, figs 7.3, 7.5) dating to the early 4th millennium cal BC. In addition, within the areas where there are predominantly leaf-shaped piercing arrowheads, triangular arrowheads are also widespread, although much less common. These occur from the beginnings of the Michelsberg in the mid-late 5th millennium cal BC, but remain in use through the Michelsberg (eg, Loewe Kooijmans 2005, 254, fig. 12.5, 1–3). This type, comprising only 1.1 % of British arrowheads in Green's corpus (1980, 147) tends to be overlooked in the British Isles, or assumed to be of later Neolithic or Bronze Age date. Some may well be blanks for barbed-and-tanged arrowheads, but Green makes a strong case for their being a distinct type with a potentially continental source, noting their concentrations in southern and eastern areas – the chalk Downs of Wessex and Sussex and in the Upper Thames valley – and the greater frequency of triangular arrowheads on the continent (Green 1980, 147, fig. 54). His distribution map also shows what appears to be

Figure 15.3: Chronology:  
southern Britain

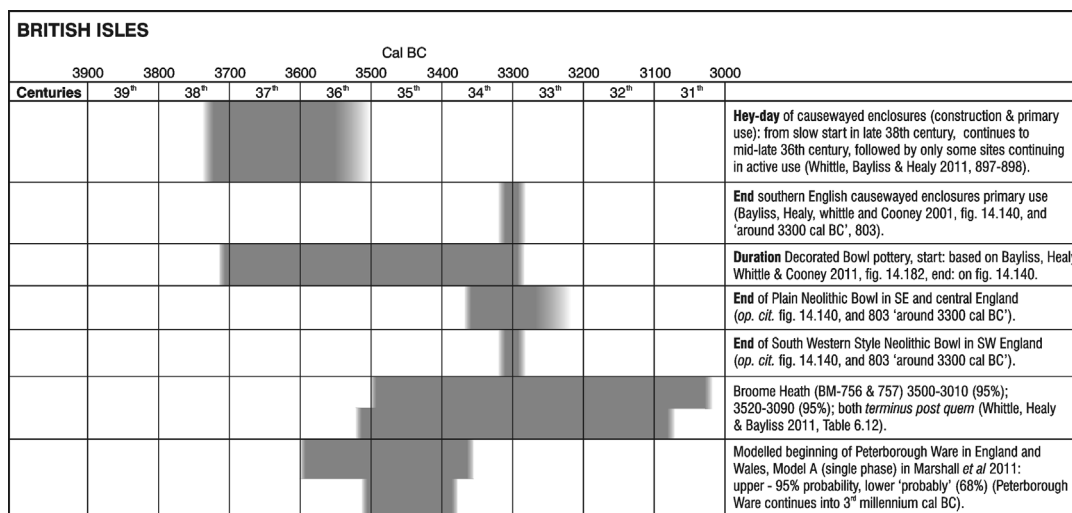
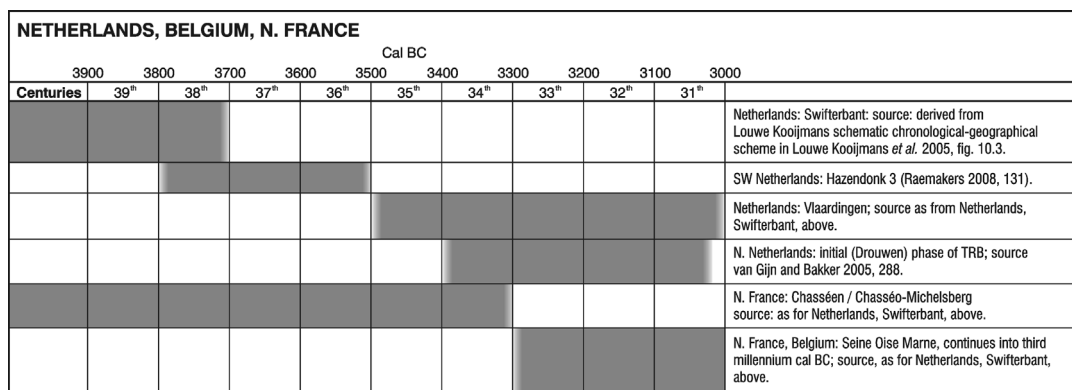


Figure 15.4: Chronology:  
Netherlands, Belgium,  
N. France



the greatest concentration of the type in the Breckland area of the Norfolk/Suffolk border (*ibid.*). East Anglia also figures in another fairly clear case of contact – in this case of ceramics – with the continent, which, once considered to be involved in the earliest stages of the British Neolithic can now be seen, following re-appraisal of the ceramics and the new modelling of dates for the southern British Early to Middle Neolithic, to belong to the period of causewayed enclosure building and use.

The occurrence of ceramics which appear to share some characteristics with earlier Neolithic pottery has been recognised since the mid-1970s (Louwe Kooijmans 1976, 272). In the period of the first occurrences of transverse arrowheads in the British Isles one of the contemporary cultural groups of the near continent is the Michelsberg-related Hazendonk group of the southern Netherlands. The cultural associations of that group have been revised since its first

recognition in the 1970s, the then phases Hazendonk 1 and 2 being recognised now as part of the not fully Neolithic Swifterbant, and Hazendonk 3 now being recognised separately as essentially Michelsberg-related and active in the period from about 3800 cal BC, going out of use (to be replaced by the Vlaardingien and TRB) at around 3500/3400 cal BC (Fig. 15.4; Raemaekers 2008, 131). Louwe Kooijmans has long remarked on the similarity of some of these north-western Michelsberg-related ceramics in the Netherlands to some carinated bowls of the early British Neolithic (eg, Louwe Kooijmans 1980, 204; 2005, 259 for a recent example). The similarities between British examples and those from the Netherlands once appeared to belong to the earliest stage of the British Neolithic, but the recognition by Herne (1988) that S-shaped bowls, particularly those from Broome Heath, were not earliest Carinated Bowl was particularly pertinent as Broome Heath (only about 20 km from the North Sea coast; Fig. 15.2) has some of the

closest parallels for sites such as Het Vormer (Louwe Kooijmans 1980) (Fig. 15.5). Broome Heath remains, unfortunately, poorly dated, although Healy *et al.* (2011, 345) accept the two existing dates as giving relatively late *termini post quos* for the assemblage (posterior density estimate for BM-756: 3500–3445 (5%) or 3380–3080 cal BC (90%); and BM-757: 3520–3100 cal BC (95%)) (Figure 15.3 shows unmodelled dates). With only two bulked oak charcoal dates on two pits out of a much larger group some doubt must remain as a post-3300 cal BC date would place them later than most British comparative material and it seems much more likely that they belong to the timespan of other Plain Bowl pottery. As such they could be either inspired by the ceramics the other side of the southern North Sea, or the reverse may be true, the chronology being at present too little refined to distinguish between the two possibilities. If the appearance and development of decoration is taken into account too, however, it is arguable that the direction of influence was from the continent to eastern England rather than the reverse.

Whittle, Bayliss, and Healy, while pointing out that it seems unarguable that interrupted ditch enclosures must have been in part inspired by examples from continental Europe, note at the same time that ‘no one has suggested, for example, that the Decorated pottery style need relate to earlier fourth millennium continental inspiration’ (2011b, 882), but this is an omission which I would like to attempt to rectify to a limited extent. Decoration on pottery in southern England appears relatively swiftly, and largely concurrently with enclosures, at around 3700 cal BC (Bayliss *et al.* 2011, fig. 14.142; Whittle *et al.* 2011b, 877). The sub-styles of the Decorated tradition (Smith’s 1956 sub-styles of Whitehawk, Mildenhall, and Abingdon Ware) carry decoration of fairly limited forms, mainly impressions, with some grooving and incision. The decorative schemes are simple and mostly confined to repeated units of decoration occurring around the rim top, neck and shoulder/upper body of carinated vessels. There are admittedly very few obvious parallels between the British Decorated examples and any pottery on the continent at a similar time, but there is very little decorated pottery anywhere; the Michelsberg, for example, being notably generally lacking in decoration, particularly in

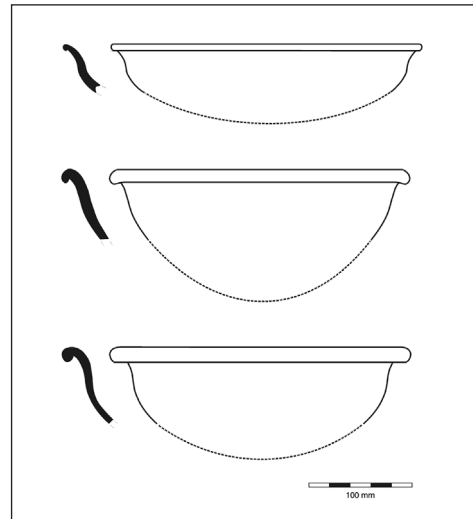


Figure 15.5: *S-shaped bowls, from top: Het Vormer, Netherlands (after Louwe Kooijmans 1980, fig. 23); Broome Heath (after Wainwright 1972, P274); Staines (after Robertson Mackay 1987, P33)*

those areas closest to Britain (eg, Whittle 1977, 131, fig. 32 for Belgian Michelsberg ceramics). In the Rhine Meuse delta area, however, there is a tradition of decoration stretching back into the 5th millennium cal BC in the ceramics of the Swifterbant. Decoration of impressions applied at random, and fingernail impressions, are common (eg, Louwe Kooijmans 2005, fig. 12.9), and are particularly apparent in Hazendonk 3 assemblages. While this may seem unconvincing, the possibility of contact is clearly raised by, among others, the S-shaped vessels at Het Vormer, some 120 km inland, referred to above. If contact is represented by those largely plain vessels, it is also possible that there would be contact with decorated pottery which was circulating at the same time and in the same areas. Although no strikingly similar vessels are notable in the southern British Neolithic at least one, from Staines, raises some questions, as it has all-over rustication and is not heavy-rimmed (Robertson Mackay 1987, fig. 51, P171). It might be argued that even reported observations, from individuals who had had contact with distant places, could act as a catalyst for the beginnings of decoration, if the potters were not themselves moving.

### And what came after ....

There is a striking contrast between the earliest transverse arrowheads – a few isolated examples of fairly simple forms – and the large concentrations of arrowheads seen by around the turn of the 4th millennium cal BC



but it is not clear how this came about. Pitts (1978), Smith (1974), and Green (1980; 1984), cited above, all identify, to varying degrees, an association with Peterborough Ware for the chisel type with some continuation into a time when Woodlands style Grooved Ware was in use. Smith was the most cautious of the three, and in this she seems justified, as closed associations with Peterborough Ware, although they occur, remain occasional. What is clear is that there are very large concentrations of transverse arrowheads largely of chisel type, in surface concentrations at sites like the West Kennet Avenue, The Sanctuary (both Avebury, Wiltshire) and in the Stonehenge area, notably from W31 and W59 from the Stonehenge Environs Project (Harding 1990).

These are difficult deposits to date because of the lack or rarity of closed contexts, but at West Kennet Avenue a radiocarbon date from a feature with Peterborough Ware lies in the very late 4th millennium or the first half of the 3rd millennium cal BC (HAR-9695,  $4260 \pm 80$  cal BC (95%), Allen & Davis 2009, table 1). Holgate, in his study (1988) of the Thames Basin, recognised the very large surface concentrations of transverse arrowheads in both the Avebury and Stonehenge areas, although as he did not subdivide them into chisel and oblique types it is not possible to establish any difference between potential Middle Neolithic scatters and those likely to date from the currency of Grooved Ware. The numbers, however, are large and do include considerable numbers of chisel arrowheads (author's observation). Foot of Avebury Down, for instance, a site to the east of Avebury, is listed (Holgate 1988, 242) as having 21 transverse arrowheads, and these are largely chisel forms (author's observation), while the surface scatter from Windmill Hill has an astonishing 562, including both chisel and oblique (Holgate 1988, 242).

The concentration at Windmill Hill, in particular, raises the question of the role of the arrowheads in the local environment, and the numbers of transverse arrowheads are almost matched by leaf-shaped (386) and later barbed-and-tanged forms. (As Green argues for *petit tranchet* arrowheads not being Mesolithic, and notes that there is a concentration in the Windmill Hill area, it seems likely that they belong with the chisel arrowheads at this site, a view strengthened by there being very little

evidence of Mesolithic activity in the area.) Green argued for conflict as a significant motivation for the production of arrowheads, rather than hunting (Green 1980, 179, repeated in 1984, 35) and the distribution in the Avebury area does raise the question as to whether this might be the case, although this would have to be extended to the earlier leaf-shaped arrowheads as well as to the later barbed-and-tanged concentrations. It would seem worth noting, for example, that if the (probably) 35th century cal BC 'battle of Crickley Hill' (Dixon *et al.* 2011, 453–4) had taken place at a site with no palisade to 'catch' incoming arrows and to burn and leave a physical trace it is likely that the event would not have been recognised.

This may seem far-fetched, but as an explanation for distributions which are concentrated in very high numbers around particular locales, rather than as scattered across the landscape, and in times when the wild component of faunal assemblages is low, it seems worth consideration. It is surely not impossible that places which were persistently returned to within the landscape were desirable and therefore potentially contested spaces and that we should not be surprised to see a recurrent pattern of contest particularly at a time of increasing recognition of violence within the British Neolithic and prehistory in general (eg, Carman & Harding 2004). In-depth examination of some of the large concentrations, such as Foot of Avebury Down or West Kennet Avenue might offer a way forward in this. Harding's work on the transverse arrowheads of the Stonehenge area, for example, included intriguing observations on peculiarities of manufacture which could be traced from one site to another (Harding 1990, 221).

## Conclusions

The intention of this paper was to highlight the appearance of transverse arrowheads, a phenomenon which arguably has received less attention than it deserves. It is not the only example of exactly this phenomenon going almost unremarked: Allchin, for example, notes the appearance of a large number of transverse arrowheads in the stratigraphy of a Bantu site in equatorial Africa (Allchin 1966, 48), commenting that it suggests a change in hunting methods, although no further

explanation is offered for the change. Green, although he discusses the use of transverse forms of arrowhead (Green 1980, 175–7), does not offer an explanatory framework for their appearance and frequency, but he does conclude that hunting alone is not likely to be responsible as he notes the low representation of wild animals in Neolithic and Bronze Age faunal assemblages. Instead, Green infers, for all arrowhead types, that the targets of the people who fired them were more often other humans than animals (1980, 179). He also notes in passing that there is at least one example known of a transverse arrowhead (in this case a *petit tranche*) being used against a human victim, from a Neolithic rock-cut tomb in the Petit Morin (Marne), where one skeleton has an arrowhead embedded in the vertebra (Green 1980, 177). It seems possible, too, that the form would be more likely to produce soft tissue wounds and would not often become embedded in bone. The only contradictory evidence which can be cited might be that of the bird-bone-impressed decoration on some Peterborough Ware, but this is a relatively uncommon form of impression and can hardly be used to invoke widespread fowling, certainly not on a scale to explain the adoption of a new practice over a large part of the British Isles or the truly astonishing numbers of arrowheads found in the Avebury and Stonehenge landscapes.

So what interpretation might be offered for the appearance and development of the type? I would suggest that there is a small body of evidence which can be taken as support for the suggestion that the middle centuries of the 4th millennium cal BC, perhaps 3600–3300 cal BC, continued to be a melting pot of outside influences, long after the obvious contact period of the earliest Neolithic. These include the obvious parallels for interrupted ditch enclosures, similarities in plain S-shaped Bowl pottery to some bowls of the Hazendonk group in the Netherlands, examples of chisel (and *petit tranche*) arrowheads in early contexts, the appearance of modifications to the surface of ceramic vessels, including rustication, to which can be added the occurrence of Windmill Hill type antler combs at Spiennes, Belgium (Whittle 1977, 135). There is, arguably, an eastern bias to many of these, and particularly an East Anglian one (Fig. 15.2). All the early occurrences of transverse arrowheads are in

the south or east (Etton, Broome Heath and Hurst Fen in East Anglia; Staines (and the possible early deposit at Eton Rowing Lake) in the Thames Valley and Whitehawk in the far south-east. It seems likely that Mildenhall Ware, with its heavy rims and often extensive impressed decoration, may be the ceramic style from which Peterborough Ware developed, and other emerging Peterborough Ware traits are traceable in this area: it is interesting that there are Peterborough Ware-like rims among the plain wares at Staines, for example (Robertson Mackay 1987, 76, 84, P172–4). Staines is a particularly interesting assemblage, including as well as these plain Ebbsfleet-like rims, a rusticated simple-rimmed pot not unlike some Hazendonk examples (*op. cit.*, P171). There are also s-shaped vessels at Staines, which, I noted in 1992, gave the assemblage some similarity to that from Broome Heath (Cleal 1992) and therefore also potentially linked to the S-shaped bowls in the Netherlands. Overall, this suggests the possibility of an ongoing sphere of contact, perhaps along the coastal regions of the southern North Sea, but one in which, perhaps, relatively few individuals actually moved.

Any discussion of what happened in the succeeding centuries of the 4th millennium cal BC, say 3300–3000/2900 cal BC has to be even more speculative. The dating of Peterborough Ware remains in outline only, recent work by Marshall *et al.* (2011) confirming the likely start date in the mid-4th millennium cal BC suggested by Gibson and Kinnes (1997) and by Gibson (2002, 80) (3500–2900 cal BC (Ebbsfleet), 3600–2300 cal BC (Mortlake) and 3500–2500 cal BC (Fengate). The end, however, they consider much earlier than in the Gibson and Kinnes paper and therefore overlapping with Grooved Ware much less than in that model (Grooved Ware in southern Britain dating from around 2900 cal BC (Garwood 1999)). It is much more difficult to argue for contacts across the North Sea or English Channel during this period, as both ceramics and lithics appear to develop insular traits. The development of the heavy and complex rims within the Decorated Bowl tradition, which it is clear led to Peterborough Ware, may well have been in part due to the intense periods of social interaction which occurred at causewayed enclosures. In the plain South Western tradition rims remain fairly simple but a range of lugs develops, some quite clearly influenced from

the Chasséen, but lugs are far less frequent in the Decorated ceramics of the south-east. Manipulation of heavy cooking and serving vessels is greatly facilitated by attachments, but also by out-turned rims with a clear lip, such as many of the heavy rims have (and as do many Peterborough Ware forms). What may have been in part a functional development would also have provided a useful and highly visible context for decoration, one which over time was extended to other areas of vessels.

During the closing centuries of the 4th millennium cal BC the material culture of the other side of the North Sea and English Channel appears to diverge much more markedly from that of the British Isles than in the preceding centuries. To the south, the Seine Oise Marne is a largely plain flat-based ceramic tradition, as is the Vlaardingen, the latter in those areas which previously had shown some close similarities to southern British ceramics (as discussed above). The ceramics of the TRB, to the north and east, while highly decorated, show no similarity to the contemporary ceramics in southern Britain, and the Pitted Wares of Scandinavia, once thought to be related to Peterborough Ware, are too late to be relevant (Whittle 1996, table 6.3). Transverse arrowheads, although the prevalent type in the TRB, do not develop over the same stylistic trajectory as British examples. But even in this context of lack of similarity there are one or two intriguing features which could be taken as an indication that occasional contacts were still made.

The deposition of pots in watery places, so striking a feature of the Peterborough Tradition, particularly in the Thames, is characteristic of the TRB (but is also known from the preceding Swifterbant (van Gijn & Bakker 2005, 289), while at both West Kennet Avenue and The Sanctuary there are finds of Niedermendig lava which appear likely to be genuinely Neolithic deposits (Smith 1965, 234). But these are tenuous possible links, and it seems much more likely that the social and/or economic ties which had perhaps persisted between either side of the water over many generations were weakening. There is some evidence that ties were developing and strengthening with the west, perhaps related to sources of non-flint lithics, such as Graig Llwyd. The passage grave of Bryn

Celli Ddu has a Bayesian modelled (95%) date range of between 3074–2956 cal BC for its construction, and this unmistakable evidence of links across the Irish Sea is supported by the identification of a Carrowkeel Bowl 10 km to the north (Burrow 2010, 262–3, 266). So here, towards the end of the 4th millennium cal BC, we are perhaps seeing the very end of a long tradition of cross-Channel and North Sea contact, as southern England passes out of a sphere of continental interaction and becomes increasingly westward-looking. It is in this environment, perhaps, that the material culture and practices associated with Grooved Ware are able to spread so quickly and thoroughly through southern and eastern England, but that is another story.

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## Biographies and Afterlives

*Mark Edmonds*

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*Time and memory are recurrent themes in the work of Richard Bradley, and that includes exploration of the roles that objects played in helping society to remember. It is around this topic that this paper is constructed; the subjects under consideration being several Neolithic flint and stone axes held in public and private collections. During their active lives axes operated as extensions of the self, evocative of people and their place in the world; but what of their afterlives? Here a series of short biographies are offered that identify some of the recurrent themes that emerge in these recent entanglements, exploring how institutional and personal relationships have often been mediated by the possession, circulation, and deposition of axes. Ever since their creation, axes have been collecting people.*

'Been it. Seen it. Mean it...I've been used: abused, disabused, misused, mused on, underenthused, unamused, contused, bemused and even perused. Any compound of used but chiefly used: shaving bowl, vinegar jar, cinerary urn, tomb good, pyxis, vase, rat-trap, krater, bitumen amphora, chamber pot, pitcher, executioner, doorstep, sunshade, spittoon, coal scuttle, parrot rest, museum exhibit, deity, ashtray...' Tibor Fischer. *The Collector Collector*

*Time and memory* are recurrent themes in the work of Richard Bradley. Over the past few decades, he has done more than anyone to guide debate about *the past in the past*, about how time was made and drawn upon in the flow of social life. From the invention of tradition to the tracing of origins in nature, his work has shed a critical light on the strategic appropriation of sequence and the construction of social memory. Alongside all

his work on monuments and landscape, Richard has somehow also found time to explore the roles that *objects* played in helping society to remember, and it is with this that this short paper is concerned. In what follows, I want to build upon the idea that even *small things forgotten* have afterlives. And given our shared experience (Bradley & Edmonds 1993), it seems both fitting and kind of inevitable that the most appropriate vehicle for exploring this idea should be the stone axe.

Axes of flint and stone occupied a prominent place in the imaginations of Neolithic communities. Crucial to many tasks, they were certainly *extensions of the hand*. But they were also *extensions of the self*, evocative of people and their place in the world. Various stages in the life history of a blade could be implicated

in this. Inspired by stories that trickled down from the Alps (Petrequin *et al.* 2011), it was sometimes the *source* that mattered, symbolic weight derived from the journey and the drama that the procurement of material involved (Edmonds 2004). There were also the skills engaged in production and use, techniques themselves an expression of identity. And beyond this were the stories of the shoulders on which axes had hung and the hands through which they had passed, genealogies that played their part in articulating relationships. There was, no doubt, a considerable variety in all of this. Many blades were used and abandoned without much reflection. But some things mattered more than others. Gifts possessed duration, axes could be carried between generations and in these and other cases, the details of form, raw material, and finish could all play a part in sustaining the biography of a blade. It is perhaps because of this that we find evidence for the careful wrapping of individual axes, a form of curation that contained their power and enhanced their capacity to carry people with them (Wentink 2006). Some were even probably recognised as named and animate entities in their own right and were sufficiently entangled with people that death sometimes required parallel forms of treatment for body and blade.

But what of the *afterlife* of axes? What happened after a blade was lost or buried, after relationships had faded and the specifics of biographies had fallen from social memory? For some axes at least, this was only the beginning. They have been collecting people ever since.

## Thinking through axes

The axe has occupied a pre-eminent position in the discipline from the beginning. A building block in the foundation of ideas about prehistory, it has been prominent ever since, a fossil of particular periods and a touchstone for arguments about the changing character of society. It took a long time for the category to form, the *thinking through* of axes part of the process through which the discipline defined itself. The *Donner-keils*, or *thunderstones* that had found their way into the *Wunderkammern* of Renaissance Europe needed no other explanation. The *Cerauniae* described by Pliny were a given; Jovian cast-downs with apotropaic

potential, omens to be read and remedies to be applied, they also reflected well upon the taste and cultivation of their new owners. And yet, with time, the stone blades that graced so many cabinets began to shift upon their shelves, a messy conjunction of conditions encouraging different readings of elf shot and thunderbolts. From the later 16th century onwards, '*Impyres*' were collapsing distance, encounters with cultures outside of Europe triggering a flow of objects into learned circles that challenged established views of nature and history (Wolf 1982). Unicorns gave way to Narwhals, and individuals such as Michele Mercati, who compared thunderstones with non-western artefacts in the Vatican collection, began to chip away at old certainties (Goodrum 2008; Schnapp 1997). Other currents also helped to turn the tide; debates in Natural Philosophy and the eclectic interests of antiquarians establishing axes as *artefacts* and as *evidence* of the human past (Pearce 2007; Piggott 1989). By the later 17th and early 18th century, this reclassification allowed scholars to begin thinking in very different ways about the past and how it might be studied (Goodrum 2002; 2008, 486–7).

From then on, comparison with tools from around the world established a concern with the various uses to which axes were put. It also raised questions about the character of early European society, questions which some sought to answer with crude socio-evolutionary models (Gosden 2002). Given momentum by the industrial revolution, stage-like models of social development placed a priority on technology as a significant driving force (Lubbock 1865; Morgan 1877). And with the tying of typology to time and progress (Pitt-Rivers 1874), the central significance of the axe, both as a tool of transformation and as a *fossile directeur* was firmly established (Boyd Dawkins 1880; Childe 1942; Kendrick 1925). Not that this mattered to most people. Despite the message being laid out and driven home in temples of edification (Bennett 2004; 2005), many had little cause to question the origins of the blades that sat in their cattle troughs and in the eaves of their houses. Stock were healthy, the house had not been struck by lightning, the children slept well.

Since then, there have been further shifts in our approaches to axes in prehistory, some of them driven by changes in evidence (eg, Keiller *et al.* 1941), others from new engagements in

the social sciences (eg, Gosden & Marshall 1999; Hoskins 1998). From early suggestions that they were more than simple extensions of the hand (Clark 1965), to today's almost limitless interpretative play, things are definitely not what they used to be. And yet: throughout the last three centuries, argument about the *original* significance of axes has shifted back and forth with only scant acknowledgement of their entanglement in contemporary discourse. We've asked questions about what such objects meant five or six thousand years ago, how they were used, regarded and drawn upon in the playing out of people's lives. But we've only recently begun to explore how these same items became involved in the lives of those who found, collected, and curated them, and how one set of relationships bled into the other (but see Giles 2006; Moreland 1999; and also *Rethinking Pitt Rivers* at the Pitt Rivers Museum online). The history of that involvement is so complex that exploring collections often means dealing with the same concerns that we address in our work on prehistory. Where and who did artefacts come from? Under what circumstances were they given and once acquired, to what uses were they put? This is often just the beginning, for it is clear that disciplinary communication has often been mediated by the flow of axes. Acquisition, display, the giving of bequests, and the circulation of blades were part of the process through which relations and reputations were worked upon. There is no small irony in the fact that collectors, curators, and other academics have participated in various kinds of barter and gift exchange, whilst arguing that the interpretation of axes was largely a matter of determining function and chronology.

The threads binding axes and people also extend beyond the academy. In one way or another, old blades have been forming relationships that have little connection to academic discourse, but are no less powerful for that. The stories of those relationships are no substitute for work on prehistory, nor do they provide off-the-peg analogies to carry back through time. After all, few of them are grounded in the practical experience of working with stone blades, at least not in ways that would have been taken for granted in the Neolithic. But they are, nonetheless, important in their own right, part of the biography that

needs to be acknowledged and a reminder of just how messy, contrary and confusing our relationship with things can be. Here are a few to add to those you already know.

## Memory and invention

In the summer of 1801, William Cunnington excavated Upton Lovell G2a, an Early Bronze Age Bowl Barrow on the flank of the Wyle valley that has come to be known as *The Shaman's Grave*. In his *Manuscript Letters* (vol. 1, 15–18), he remarks on the associations of two inhumations, one prone, one seated; an inventory that includes perforated bone points and boars' teeth, whetstones, mullers, beads, hollow flint nodules or 'eagle stones', non-local pebbles and stone hammer fragments, a bronze awl, a battle axe, and a shale ring. What makes the assemblage truly remarkable is the presence of four polished flint axes, three of them more or less complete (Fig. 16.1). The forms suggest they were made many centuries before the barrow was raised. All four blades show scars of service and the kinds of damage often caused by falling out of use and out of sight. In this they resemble most of the axes recovered across the region, making it likely that they were *discoveries*, objects returned to the hand and recruited to serve new interests. They may well have been discovered together as a small hoard (Pitts 1996).

What interests were served by their appropriation is difficult to say. Had they been found in an earlier enclosure, in the ditch of a long mound or a Neolithic pit, interpretation would probably turn upon *memory*. We'd infer the recruitment of objects whose life histories and associations were available to be recalled. But the meanings of things are not secure. Stories are seldom told the same way twice, gifts shift and things get reinvented, as was probably the case here. Hints as to the significance of these old blades can be found in the company they keep; fossils, pebbles and nodules, some of them '*... not to be found in the neighbourhood*' (Colt Hoare 1810, 76). Some were *pieces of places*, important because they brought the distant to the graveside (Helms 1988). Others mattered because they held distinctive patterns on their surfaces, because they contained crystals that caught the eye and the imagination, or because they offered an organic form rendered in stone (Saunders 2004). In this company, the old blades



Figure 16.1. Flint axes from Upton Lovell G2a (Photo courtesy of the Wiltshire Heritage Museum, Devizes).

were *articles of consequence* (Colt Hoare 1810, 203), *relics* that spoke of a past outside the delineations of genealogy (Woodward 2002). Whatever biographies they had acquired since rediscovery, they also embodied a different kind of time; a past beyond more recent stories of standing and descent, a time perhaps of origins and enchantment (Garwood 2007). They possessed a kind of gravity and that may be why Cunnington found them in this particular mound. Many see the eclectic mix of artefacts as the accoutrements of a Shaman, while others point to a link with metalworking (Piggott 1962; Shell 2000; Woodward 2000). The old blades work in both scenarios, and would, no doubt, have offered symbolic capital in other situations too. As relics, they were important to those with a capacity for transformation. People who could manipulate materials, who could move between worlds, and, when conditions were right, bring different times together.

For Cunnington, a draper and wool merchant who took up antiquarianism on the advice of his physician (who reputedly told him to ‘ride out or die’), the relative antiquity of these axes was not an issue. More important was the search for parallels, leading him to ‘...

one described by Borlase, which is of white flint and very much like fig.3’ (*Manuscript Letters* vol. 1, 16). He was certainly aware of the possibility of appropriation, not least through work on sites like Boyton G5, where *c.* 13 Anglo-Saxon burials were inserted into another Bowl Barrow (Colt Hoare 1810, 101–2). But chronology was different then, appropriation significant because it confirmed ideas about longer sequences. What mattered was that *Saxon* burials were stratigraphically later than those attributable to *British* or *Celtic* populations. Time depth in such a singular deposit of artefacts was not something that Cunnington was in a position to explore. It was enough to conclude that ‘... every thing we see indicates a remote period – probably before either Brass or Iron were in use in this island, or if arms of the former metals were at all in use they were only to be found in the possession of the great Chieftains’ (*Manuscript Letters* vol. 1, 18).

Revived by this second episode of rediscovery, the four axes were now implicated in a new set of social relationships. In keeping with the custom of the time, they featured in a report, sent as a letter to Aylmer Bourke Lambert, a botanist and founding member



Figure 16.2. Cornish  
Axe from Perry  
Oaks (Photo courtesy  
of Framework  
Archaeology/ Wessex  
Archaeology Ltd).

of the Linnaean Society whose name is perpetuated in the genus *Lambertia* (wild honeysuckle). Lambert was also a keen antiquarian and read the letter aloud to a meeting of the Society of Antiquaries in 1803 (Cunnington 1806). Beyond the commitment to furthering knowledge that the letter represents, Cunnington's descriptions of the axes and their associations were important in other ways as well. Discourse on these 'remains of ancient workmanship' placed Cunnington, *an ingenious tradesman* in the words of Sir Richard Colt Hoare, in an august company, albeit one that was easily and frequently lampooned. There was a certain standing to be had from the cultivation of such interests, a standing also reflected in the richness of one's personal collection. This was sufficiently important that access to material was often guarded, not only by Cunnington, but also by his patrons; people like H.P. Wyndham, the Revd Coxe and Colt Hoare himself. Patronage meant privilege, a way of protecting evidence from the interests of others until full use of that evidence had been made, as Colt Hoare did, with due acknowledgement to Cunnington, in *Ancient Wiltshire* (Colt Hoare 1810).

Along with the results of many excavations, most conducted with his regular '*barrow men*' John and Stephen Parker (Everill 2010), Cunnington held on to the axes until his death in 1810. They were then acquired by Colt Hoare in 1818, the purchase adding significantly to his own collection at Stourhead, where they remained for 60 years. After that, they were loaned to the museum in Devizes, which Cunnington's grandson had helped to establish and where he held the first post of honorary curator. Made in 1878, the loan became permanent five years later when the museum purchased the entire collection. It was on the premises when Cunnington's great-grandson, Ben, also took on the role of honorary curator, a post that he held for nearly 60 years. By that time, and beyond the renewed family connection, the axes had taken on a new significance, as part of a collection that testified to Cunnington's status as a disciplinary ancestor.

### Down by the water

As Richard himself has shown, Upton Lovell is remarkable but not an isolated case (Bradley



2002). Stone axes are found on many Bronze Age and Iron Age sites in Britain, and though most are topsoil finds, some are definitely placed deposits (Bradley & Ellison 1975; Clough & Cummins 1988; Stone 1941). The details of placement vary, but include settings in the base of ditches, in pits and in the post-holes of buildings. At Perry Oaks, Heathrow, Middlesex, Fiona Roe has recently drawn attention to a Cornish (Group I) stone axe placed on the primary silts of a Middle Bronze Age waterhole (Roe 2010). The blade may have been in a bark container and was accompanied by a bone point and several wooden objects, including a possible haft for a bronze axe (Fig. 16.2). It is a pattern repeated across the Channel, where Neolithic axes have been recovered from the hearths and post-holes of Iron Age buildings and from Bronze Age and Iron Age graves in both Germany and Southern Scandinavia (eg, Holtorf 1998).

Here again, the idea of *relics*, of objects that evoked connections with a mythic or ancestral past, may be useful. Deployed in rituals of foundation, they lent a certain weight to the connections being made between people and place. But circumstances varied, and so did intentions. Roe suggests that the axe at Perry Oaks was placed at a time when the waterhole was drying out, perhaps as an offering intended

to help restore the source. Even in later prehistory then, stone axes, amongst other things were already perceived as offering protection against misfortune. In this, folklore that recalled their significance as appropriate ‘*gifts to gods*’ (Bradley 1990) may have served to underwrite their atropopaic potential. It may have been this that also directed the inclusion of both complete and fragmented examples in the hearths and post-holes of buildings, a practice seen at places like Boscombe Down, Thorney Down, and Broom, where half of a Cumbrian (Group VI) axe was deposited in the post-hole of a Late Bronze Age building (Cooper & Edmonds 2009; Stone 1936; 1941). The deposition of such talismans helped to ward off evil spirits and promoted the health and fortune of the household. And perhaps even then, these stones that sparked and smoked when struck were recognised as thunderbolts, hurled to earth by powerful forces. A deposit made the lightning strike elsewhere.

These associations appear to have been remarkably persistent (Bradley 2007; Carelli 1997; O’Sullivan & Nichol 2010), though how far we can assume continuity in this is debateable. It is tempting to infer the persistence of a kind of *background noise* in folk memory, sustained through the continual recovery and identification of old blades as people worked land, built houses, dug ditches and so on (Holtorf & Gazin-Schwartz 1999). However, what historical records we have point to a real diversity of opinion, and this, coupled with the evidence for similar responses in different parts of the world (Johanson 2009; Petrequin & Petrequin 2011) may equally suggest that the distinctive form and properties of old blades were often striking enough that they demanded interpretation in these terms. What *is* clear is that these things still mattered in the relatively recent past. In a volume that did much to set the tone for stone tool studies for many decades, Sir John Evans observed that:

‘... Stone celts are held to preserve from lightning the house in which they are kept. They perspire when a storm is approaching; they are good for diseases of man and beast; they increase the milk of cows; they assist the birth of children; and powder scraped from them may be taken with some advantage for various childish disorders’ (Evans 1897).

Evans may have been drawing upon sources that were already of some antiquity at the time

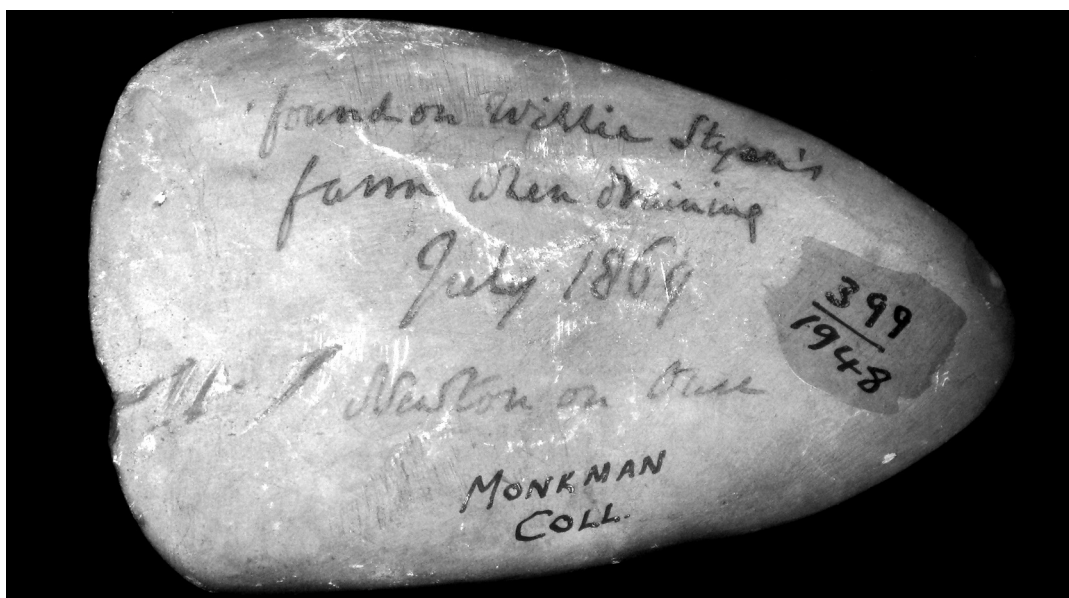
of writing. We can also assume a familiarity with classical sources. However, his travels and collecting evidently brought him into contact with people who recognised axes in the ways he describes. It did not stop there. As recently as 1902, a guide to stone age antiquities at the British Museum noted that ‘... only a very few years ago, application was made to the director of the Liverpool Public Museums for permission to apply a stone axe-head to the body of a sick child’ (British Museum 1902). These things made a difference and for some, they still do, albeit often in a rather knowing way. In 2008, a colleague conducting survey in the attic of a timber-framed building in Yorkshire was delighted to find a flint axe wedged firmly between the collar and principal blade of the frame. Drawing the attention of the occupants to his discovery, he asked them if they had been aware of it. *Of course*, came the reply. *We put it there*.

### Found while draining

Childe famously argued for a link between the appearance of Neolithic ground stone blades and the emergence of new socio-economic conditions in Europe (Childe 1942). In the 18th and 19th centuries that relationship could again be traced, though this time the arrow pointed in the opposite direction. From the middle decades of the 18th century onwards, enclosure and improvement transformed the landscape in many parts of Britain. The character, timing, and impact of these developments varied significantly from one part of the country to another (Williamson 2002). But one of the unintended consequences was a heightening of interest in antiquities amongst the landed classes and, with time, the gentry (Pearce 2007). Part of a wider set of concerns that preoccupied those of the *right sort*, discourse on the distant past offered respite from certain aspects of the present. The same was true of Georgic poetry or the turn towards nature in many landscape parks. It was easy to get it wrong and thus to risk ridicule. But being knowledgeable on these matters remained a mark of cultivation, and this sharpened an appetite that was fed by the vast crop of artefacts being harvested from improved fields and ploughed out sites.

By the middle decades of the 19th century, collecting was a more widespread practice, one of several that animated a burgeoning

Figure 16.3. Found while draining. Note that details of provenance and accession are also accompanied by Monkman's name. Axes in some collections have been written on so many times that they deserve to be thought of as palimpsests



middle class. By then, it was land brought late to improvement which provided the greatest harvest; upland country or ground that required drainage on a more or less industrial scale. So it was in much of northern and eastern Yorkshire, where late improvement stimulated a vigorous interest in stone tools. Fuelled by broader debates, collecting remained an expression of learning. So was excavation, and both provided the raw material for narratives about prehistory, accounts which people like Canon William Greenwell and John Mortimer published in monographs and a variety of journals. But it was also something else; an instrument which defined the minutiae of individual positions within local society. In that context, the size, quality and range of personal collections engendered a certain renown and competition for material was intense. In East Yorkshire alone, at least a dozen major collectors were active (Manby 1979; Shepherd 1900). Some, like Greenwell, Evans, or Bateman, satisfied their appetites from a distance. But there were many more who were local to the area, people like John Mortimer, who took to antiquity after a visit to the Great Exhibition, eventually displaying his considerable collection in his own museum at Driffield, where axes from the Wolds lay side by side with similar blades from the Americas (Giles 2006; Shepherd 1900).

With all this interest there was money to be made. Farm workers were offered cash, tobacco, or tickets to important events in return

for their finds, a practice that led many to refer to axes and arrowheads as *Mortimers*. Demand was also met by dealers, among them James Ruddock of Pickering and Edward Tindall of Bridlington, and there was even cash in replicas. It is arguable that a keen local interest in typology was fuelled as much by a desire to avoid being duped by forgeries as it was by interest in the character and chronology of ancient cultures. This was certainly a concern for Charles Monkman, an 'energetic collector of flint and stone implements and other antiquities' and associate of Greenwell, Evans and others (Shepherd 1900). Monkman holds the dubious honour of having interviewed Edward Simpson, aka *Flint Jack*, an account of which he published, along with many other articles on antiquity, in the *Malton Messenger*. The story of Simpson's life is probably as unreliable as the provenance attributed to many of the artefacts he produced and sold (Thornton 2002). But those artefacts were still worth having, as was this rather more ancient axe (Fig. 16.3), acquired by Monkman after it was 'found while draining'.

### Ready to hand

It was not just Yorkshire. Across the water in County Antrim, William Knowles was acutely aware of the competition. Born and raised in the region, Knowles combined a passion for the past with interests in botany, geology and the natural sciences. He had day jobs too; as a teacher, as land agent to the Casement family



estate, and for many years as Secretary of the *Antrim County Land, Building and Investment Company*. Knowles' publications, and there are many, reveal a sharp intelligence, a remarkable range and a real skill in the field. He conducted a number of surveys and excavations and had much to say about landscape formation and the context and date of archaeological deposits. He was also an avid collector, amassing material in the field and through contacts with dealers (Woodman *et al.* 2006).

Knowles' reports on his investigations at Tievebulliagh are some of the earliest accounts of a stone axe source to be published in Britain and Ireland (Knowles 1903; 1906). Despite their brevity, they say a lot about the character of the place and the evidence. They are also very honest about the circumstances in which the work was conducted. Knowles had been investigating the general area for some time, and had made a number of prior discoveries. But when it came to Tievebulliagh:

'... it took my wife and daughter, with myself, several days to remove all the manufactured objects. I did not seek other assistance, as my previous finds had now come to be talked about, and I did not wish to reveal my discovery on Tievebulliagh until I had made a thorough investigation' (Knowles 1903, 363).

There was a lot to protect. By his own account, Knowles took as many as 4000 roughouts and other worked pieces from the area, though only a fraction are illustrated in his reports (Fig. 16.4). The operation also involved members of the local community, as Knowles himself acknowledged:

'The young people on various farms, when they knew the kinds of objects that were desired, collected them for me, and often my collection was so large, that I was obliged to employ a horse and cart to convey it to the railway station' (Knowles 1903, 361).

And this is where the report is particularly telling. Knowles had first been drawn to the locality by a dealer in 'black flakes'. On arrival, he enquired about antiquities in the area, and was delighted to find that material derived from the stone axe source was plentiful. However, he remarks on the fact that:

'... farmers are surprised that such poor objects should have any value, and when shown a large axe, they assert that they often put such objects in drains. I can believe this, as the finest specimen I have was used as a wedge to fasten one of the stakes in a byre or cowhouse, to which cows are tied during the night' (*ibid.*).

It is a brief aside, but it offers us a glimpse of a very different relationship between people and stone; two different kinds of appropriation side by side. Whatever Knowles saw in the stone, this was also material *ready to hand*, which by virtue of its shape and size, was well suited to use. Drains, wedges and stabilisers for walling, the latter still occasionally evident in some of the stone dykes that run off to the south-east of the source.

The relationship became more complex. Knowles notes the problem of competing interests in his first report. Three years later, the competition had intensified:

'... my constant going and returning, accompanied in the evening by heavy packages, soon drew attention and caused inquiry among local antiquaries, and raised suspicion in their minds that I was doing something that ought to be inquired into' (Knowles 1906, 386).

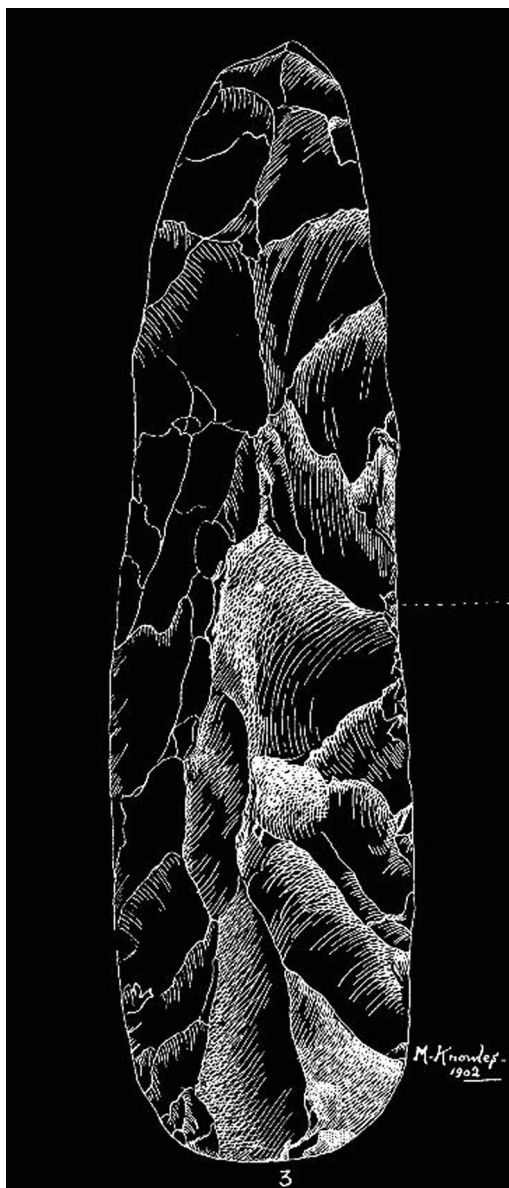
Collectors descended on the area, turning over the extensive surface deposits in the hope of finding artefacts that had not found their way onto Knowles' cart. This increased interest created a new kind of cash crop for the local community. As Knowles himself put it:

'The kindly, good-natured people, who had at first refused any remuneration for anything they found, were now tempted with good prices if they could produce specimens; but as these could not be supplied in the numbers required, at first some cunning boys in the district, and later, men of mature age, tried their skill at shaping stones into axes ... The first spurious articles offered were not detected; so more were produced, and as the work proceeded makers became more skilful' (*ibid.*, 394).

Hearsay has it that some of these fakes even had integral stone handles. For Knowles, and for scholars ever since, the problem of these forgeries has become corridor talk, a conversation repeated where talk turns to Flint Jack, or to the gunflint makers of Brandon; where are all the replicas? How many lurk unrecognised in cabinets and archives? We shall probably never know. What we do know is that for a few years in this part of Antrim, scholarly interest encouraged a rediscovery of the skills involved in roughout making and a new kind of *axe trade*. Knowles' immense collection was broken up and sold at Sothebys in 1924, part of it given to the National Museum in Dublin years later as a bequest from Alexander Keiller (Woodman *et al.* 2006).



Figure 16.4. Roughout blade recovered by the Knowles family at Tievebullagh



### Keeping while giving

Robert Dukinfield Darbishire (1826–1908) was a man of catholic interests. A solicitor based in Manchester, he combined his busy practice with active involvement in numerous charities and welfare groups around the city. He was Honorary Secretary of the Manchester Whitworth Institute and a Fellow of many learned societies, among them the Royal Anthropological Institute, the Literary and Philosophical Society of Manchester, the Conchological Society, the Society of Antiquaries, the Manchester Athenaeum, and, for good measure, the Law Society. In

whatever spare time he may have had, he was also a keen collector, with a substantial inventory of archaeological, geological and ethnological material, much of the latter still to be seen in the Manchester Museum. In archaeological circles, Darbishire is best known for his involvement in work at Ehenside Tarn in 1871 (Darbishire 1874). It was here that drainage brought a wealth of Neolithic material to light, including a series of fine stone axes in various stages of completion (see also Evans 1897, 153, fig. 92). Much of this material found its way to the British Museum, but before it travelled south, Darbishire made a presentation to the local Literary and Philosophical Society. At an evening gathering, members swapped their usual fare of papers on mathematics, insects, the nature of light or dark spots on the sun, as Darbishire:

‘... exhibited and described a series of celts, more or less highly finished, certain very interesting specimens of wooden hafts for celts, clubs, and paddles, a quern, and several remarkable grinding stones of different forms; and fragments of rude earthenware, found by Mr. Pinhorn, Mr. Quayle, and himself’ (LPSM memoir 1871, 54).

In a tradition stretching back to early gatherings of the Society of Antiquaries in London, Darbishire’s presentation that evening had a point of contact with the Neolithic that probably escaped him at the time. The *performance* mattered. The delivery of the narrative, the laying out and appropriate handling of each blade, all of this contributed to the persuasiveness or otherwise of his argument. The story that he told was of his time, the content very different from the biographies that similar blades had carried in the past. But the success of his delivery was in part because the axes were *active* in the account. The parallels did not end there. The donation of the assemblage to the British Museum was certainly a contribution to knowledge; it was also a way of guaranteeing a continuity of curatorship. But it was also something else, an assertion of connections, a way of binding oneself to a disciplinary community through the act of giving.

Darbishire also took more specific steps to ‘*keep while giving*’. Sometime around 1867, workmen cutting trenches for a new farmhouse at Steadman’s Howe in Cumbria, uncovered three large stone axe blades, all of them intact and made of a distinctive dark green *felstone* which we now call *Group VI*. The *Belmont Hoard*



Figure 16.5. Labelling on plaster casts of the Belmont Hoard presented to the British Museum

attracted a good deal of interest and sometime after their discovery, Darbshire made (or had made) plaster casts of all three (Fig. 16.5). The chequered recent history of the original hoard, which has been in turn an heirloom, a gift, a commodity and a gift once more, has been recounted elsewhere (Davis & Edmonds 2011). What is interesting here is the parallel life of the plaster hoard, which Darbshire also donated to the British Museum. Here again, there were good academic reasons for the gift. The owner of the originals was reluctant to part with his prize and subsequently gave one each to his three grandsons; without the plaster record, information could have been lost. Further insurance against that loss was provided by careful labelling: 'Casts of polished celts, dark green felstone from Steadman's Howe, Penrith ... found 2 feet deep in draining'. Yet if you turn the casts over there is another label, a small and delicate circle. On it, in a more carefully

handwritten script are the words 'Pres. By R.D. Darbshire Esq. F.S.A. 4. 9. 1873'. The donation was important, but it was no less important that the gift itself endured.

Darbshire's gift was a token. But it has all the hallmarks of a practice that has done more than anything to determine the character of what we are now encouraged to call *the resource*. Throughout the 19th century, donations to museums provided the backbone to collections held by local, regional, and national institutions. Material could move *en masse* or in small quantities; a collection even divided between institutions to whom the donor felt obliged. Other material went out onto the open market before being brought back into the disciplinary fold; the routes taking axes from private collection to public archive were varied indeed. That said, one practice dominates. Visit almost any museum and you will find their stores awash with the collections of named individuals,



Figure 16.6. a) axes from Swiss Lake Villages; b) Danish Axe; c) display case for Danish flint dagger, obtained by Thomas Boynton sometime between 1866 and 1877 from Bryce Wright, a mineralogist, collector and trader with many friends at the British Museum, just down the road from his premises



names repeated on the doors of particular galleries, and even on artefacts themselves, as is the case with several of the axes in this paper. Such collections represent the *gift as legacy*, the giving (or preferential selling) of material as a gesture towards posterity; a hope that material might be studied in the future, but also that a name might persist along with the stone.

### Weapons of exclusion

Even in the 19th century, the origins of a blade carried symbolic capital. But origins now referred less to geology and more to contexts of recovery. Possessing fine specimens was one thing; having axes from celebrated sites was altogether a different matter. Such pieces reflected particularly well upon their owner. One such was Thomas Boynton, who amassed thousands of pieces from across Yorkshire. Like many of his contemporaries, he also

coveted antiquities from the continent and made several forays into antiquarian circles across the channel, to Denmark, Germany, France, and Switzerland. The results of these ventures were displayed in purpose built cabinets, with some of the finest pieces held for presentation in individual velvet lined cases. Prominent in his collection were a number of diminutive stone blades, each with its original antler sleeve, which he obtained during visits to the waterlogged *Neolithic Lake Villages* being found in the shadow of the Alps (Fig. 16.6). Acquisition caused quite a stir. Here were artefacts from sites that featured prominently in the discourses of the day, in arguments that harnessed stone and metal to socio-evolutionary schemes. For scholars at the time, the apparent complexity and sophistication of these sites reflected a 'great leap forward', a break from savage beginnings and a significant step on the path towards civilisation and the Western

present. Axes from such sites were thus linked to new European myths of origin, making them a potent source of renown. It was this renown that Boynton sought when he laid on an exclusive display of his prizes for members of the Yorkshire Philosophical Society.

On other occasions, it was not so much the site of recovery that mattered as the place that axes occupied in broader schemes. Originally acquired by Charles Monkman, this flaked flint axe from Denmark was one of many that flowed into private and public collections during the later 19th century. Such pieces had many attractions. They were both plentiful and easy to obtain, particularly by those well placed in antiquarian/archaeological networks of exchange. Many were also complete, a prerequisite for pieces destined for display. More important still, blades like this were prominent in the detailed typological schemes that had breathed new life into the old idea of a Three Age System, first in southern Scandinavia and then in Britain (Rowley-Conwy 2007). Blades like this carried academic weight.

How Monkman came by this particular blade is uncertain. Given his background and finances, it is unlikely that he made the journey across the North Sea. He might have secured it from one of the traders operating out of Driffield, though these usually contented themselves with material from closer to home. He is more likely to have obtained it through forms of reciprocity that helped define his loose circle of antiquarian collectors. As an associate of Greenwell, Evans, and others, it probably came to him as a gift or as a swap, both common practice at the time (T. Manby, pers. comm.). For Monkman, the gift would have been significant, the handing on of blades a curious echo of the roles these objects had played several thousand years before. Since then, the blade has continued on its travels. Part of the collection sold by his widow to the Yorkshire Philosophical Society, it has moved between museums in York on more than one occasion, most recently during a phase of reorganisation that saw different institutions take responsibility for different periods. It is now back at the Yorkshire Museum.

## Belonging to country

<sup>1</sup>Few pursuits can be more fascinating than enquiring into the history of past ages, tracing out the manners

and customs of mankind in early times, investigating their origin and antiquity, and following the rise and progress of bygone races. But when these explorations are conducted on our native soil, more especially near the cherished spot which gave us birth, and in which our present joys and future hopes as to this life are chiefly centred, they then acquire the deepest interest and become invested with a special charm and value ...' (Mortimer 1905, xi).

Collecting, like participation in the discourse of learned societies, brought with it a sense of community, a form of identification through shared knowledge and the handling and ordering of antiquities. It could also be an instrument of competition. For someone like John Mortimer, who by comparison with many earlier antiquarians was from the wrong side of the drove road, a commitment to the study of the past brought with it a kind of respect (Giles 2006, 282). But that commitment was also bound to something more personal and profound; a sense of belonging to country, to landscapes that were deeply biographical.

Mortimer spoke for many of his time, and his words echo sentiments expressed a century before by another ingenious tradesman, William Cunnington. But that sense of a personal connection is not necessarily predicated on the possession of a significant collection or even on participation in digging and debate. Sometimes, it can be a matter of a single stone.

A farmer on the southern edge of the Cambridgeshire Fens, Michael C. has lived and worked on the same patch of land for most of his adult life; I met him when I was doing survey on his farm as part of the Fenland Management Project. I was on my way back to the car when we stopped for a chat in the yard. I showed him some of the flintwork from one of his fields, a scatter spread across the sand and gravel hillock that rose a metre or two above the surrounding peat. In return, he pulled a small stone from his pocket and handed it to me without comment (Fig. 16.7). The blade had seen better days; burnt, broken, with a cutting edge obliterated by concerted and repeated hammering. It was definitely an axe, or had been once. I said so, pointing to the facets on either side and hazarding a guess that it was probably of stone from outcrops in Cumbria. He nodded and took the small blade back, turning it in his hand a few times in a way that suggested it was something he'd done many times before. He'd spotted it while he was



Figure 16.7. Small and heavily damaged axe from the Cambridgeshire Fens



fixing a baler, just lying there on the surface. That had been years before and the blade had somehow found a home in his pocket.

Since that encounter, I've come across other blades in similar settings; in pockets and cupboards, on windowsills and mantelpieces, or 'around here somewhere'. Axes falling into the hands of people working land or simply out for a walk, forming relationships which have persisted over time and even across generations. I've also seen examples with similar characteristics; with evidence of burning or deliberate destruction. It is a widespread phenomenon and probably reflects a genuine concern to bring about the death or transformation of important objects in the past (Bradley 1990; Edmonds 2004; Larsson 2011). But what sticks in my mind about Michael's axe was his evident attachment. When pushed, he acknowledged that he kept it because it felt right, besides, it came in handy when he needed to sharpen a knife. But he'd known what it was long before I'd turned up and that knowledge gave the piece a certain weight. What mattered to Michael was the sense it gave of continuity; of a thread that bound his short tenancy to a deeper history of living and working on that land. He was under no illusions; the axe had not been used by his ancestors. But there it was, still useful, a connection that he found difficult to explain, but one that put at least some of his more immediate concerns into context. I imagine it is still in his pocket.

## A slight return

A small roughout axe blade, flake scars etched and pitted by the peat. I recorded it during survey in the central Cumbrian Fells, work which grew out of the project that Richard and I undertook in the area far too long ago (Bradley & Edmonds 1993). The blade lay close to a known area of working, a short distance down from outcropping rock, on an area of more level ground bisected by one of the main routes out of the area to the north. It was difficult to miss, not least because it lay on the edge of a small cairn of stone of the kind customarily and casually accumulated by walkers. I assumed at first that it must have been added to the pile in an unconsidered manner, placed without recognition. But when I picked it up and turned it over, I found that it had been written on; the pencilled words 'stake beck' visible in a faded, lower case scrawl (Fig. 16.8).

This was not the first time I had encountered annotated blades, a number or a name referring to a particular place; *Mickleden*, *Pike*, *Scree*, and so on. And more than once, the name on the roughout bore no relation to the place I found it. In most cases, the likely explanation was fairly pragmatic. Fired by the *Wainwright* guides and other sources, enthusiasts had been grazing across the fells, collecting and marking material until the practicalities of carrying an increasingly heavy load led them to discard unwanted pieces like so much ballast. In this case I am not so sure. The blade was more or less in place for the name, and still is. It is also complete and fairly diminutive, not the kind of *prize* to be given up all that lightly. As such, it probably reflects a rather more protracted and altogether more poignant process. As I reviewed collections around the region, I occasionally heard of how the death of particular collectors, invariably male, had been marked by their widows or other relatives. Some held on to their collections, leaving the fate of the legacy to a later generation (*it gets in the way but I couldn't part with it*). Others took material to museums (*it ought to be looked after properly*) or to the skip (*you should have been here last year*). But a few made more concerted journeys, ensuring that material returned to the slopes and scatters from which it had been collected. Unfinished and diminutive though it is, the blade is in every important sense a monument.



Figure 16.8. Small roughout found in the vicinity of Stake Beck, Great Langdale, Cumbria

### Memory, forgetting and the future

I first met several of the axes featured here during my research with Richard. Others are more recent acquaintances and the hardest task I've had in writing this paper has been deciding which blades *not* to use. It was tempting to include the Jadeitite axe which was perforated, mounted in silver and suspended on the belt of 'a Scottish gentleman', to cure an *ailment of the loins*, or another recently used to tell tales of origin on the radio. Unfortunately, the details of both cases have been recounted recently elsewhere (Edmonds 2011; Sheridan *et al.* 2011). What I have tried to do here is to identify some of the recurrent themes that emerge in these recent entanglements; to explore how institutional and personal relationships have often been mediated by the possession, circulation, and deposition of axes. There is a certain irony that their renewed involvement in the lives of antiquarians and archaeologists was at its most complex at the same time as the discipline was laying down relatively impoverished definitions of prehistoric technology.

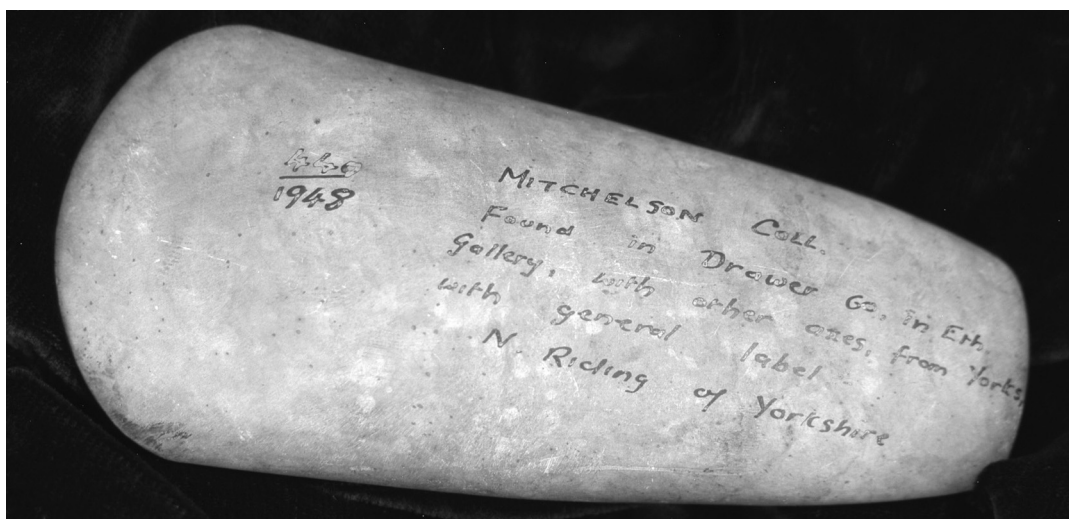
Most people reading this paper could probably come up with examples to extend the arguments made here, which in any case amount to no more than a sketch. What is needed now is a sustained and detailed genealogy of some

of our most substantial collections. In tracking the paths by which different axes came into museums, we may be better placed to trace the contingencies that shaped the development of antiquarian and archaeological interests in the 18th and 19th centuries. Here at least, we may be able to put names to particular blades, to track specific journeys and as a consequence, better understand the regional, national, and international contours of the discipline in which we work.

There is, of course, a danger that in documenting present values, values that our work has helped to shape, we simply impose the present on the past. It is a persistent problem, but one which I think is at its most acute if we simply regard prehistoric technology as hardware. Plenty of axes were made, used, and abandoned without the kinds of fetishism that some attract today. But even when they were, the stone and the skills involved in making and using them were situated and meaningful. That was why they and others like them could be drawn upon more actively, articulating ideas about identity, relationships, and origins. Whatever else they tell us about the more recent past, the rich variety of our engagements is a reminder that while things were different, they were probably no less complex in prehistory.

Axes are still collecting people. Even a

Figure 16.9. The place and memory of discovery is not fixed. Axe blade from the Mitchelson Collection, Yorkshire Museum



cursory glance at the *Portable Antiquities Scheme* website (<http://finds.org.uk/>) reveals many axes 'retained by finder', blades offered for recording but kept because in one way or another, they matter and have value. Some, no doubt, will end up on the market, prehistoric pin-ups on *Ebay* or prizes to be competed for in the *tournaments of value* that pass for major auctions. But many more will be kept, at least for a while, valued for their appearance, their feel in the hand and for the not so simple fact of their antiquity. In time, like many of the axes featured here, they'll acquire new associations, names connecting generations, making each one an artefact of personal memory. And some, perhaps, will end up in museums, donated in the hope of some kind of posterity. But nothing is fixed. The passage of an object from one archive to another is a kind of translation, a game of Chinese whispers in which the details of a story are vulnerable (Fig. 16.9). Connections are lost as objects cross the threshold, and even when they have been safely gathered in, institutions still allow a very particular kind of forgetting. That we are now in a position to talk with some subtlety about this process, and about the nature of social memory in general, is in no small part because of the work that Richard has done. For that, and many other things besides, I am very definitely in his debt.

### Acknowledgements

I would like to thank Andrew Morrison and Dave Evans at the Yorkshire Museum for their

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# Contextualising Kilmartin: building a narrative for developments in western Scotland and beyond, from the Early Neolithic to the Late Bronze Age

*Alison Sheridan*

*This contribution outlines the complex history of developments in Kilmartin Glen between the early 4th and early 1st millennium BC, taking advantage of recent research and fieldwork, and places it within the broader narrative of developments elsewhere in western Scotland and beyond.*

It is both a pleasure and a privilege to contribute to this *Festschrift* for Richard Bradley, a scholar whose work has transformed our understanding of whole classes of monument and entire prehistoric landscapes in Scotland. The awarding of the Prehistoric Society's 2012 *Europa* Prize to Professor Bradley, in recognition of his outstanding contribution to prehistoric research not only in Scotland but elsewhere in Britain, in Ireland, and on the continent, is a fitting tribute to a brilliant and inspirational prehistorian. Like so many others, this author owes Richard a huge debt of gratitude for his many kindnesses – not least for having been a gentle PhD examiner over a quarter of a century ago.

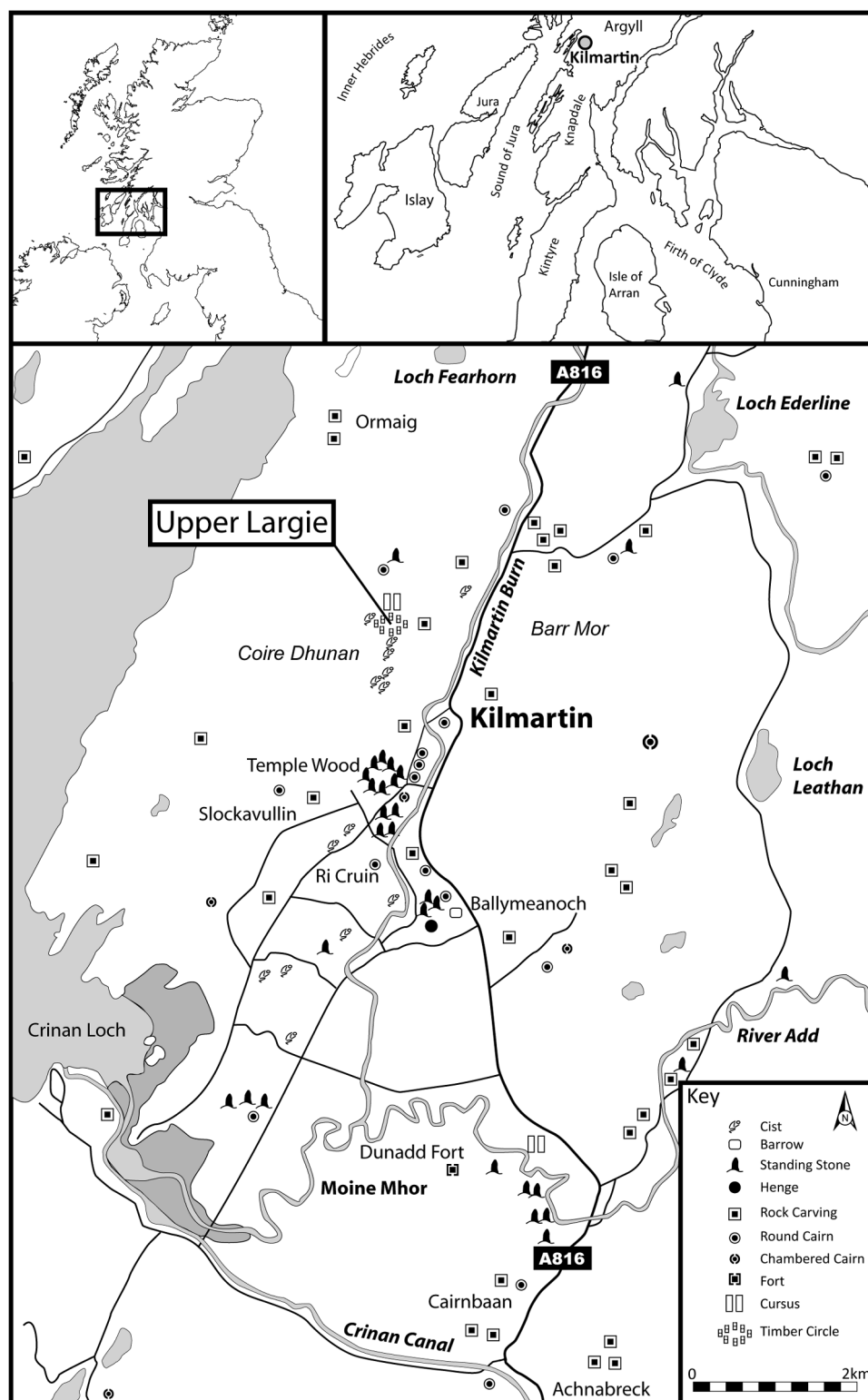
Kilmartin Glen and its broader context have been chosen as the subject of this contribution for two reasons. Firstly, the Glen has featured in Richard's many publications (eg, Bradley

1993, chapter 4) and he has provided valuable insights into its rock art (Bradley 1997, chapter 7). Second, new discoveries and new research in and near the Glen over the last decade have greatly enhanced our knowledge of its prehistoric archaeology, and developments further afield – including Richard's excavations of Clava cairns and of the monument complex at Broomend of Crichton in north-east Scotland (Bradley 2000; 2011) – allow us to refine the chronology of the Glen's monuments, and to appreciate their broader context.

## **Kilmartin Glen: the landscape, its monuments, and recent research**

Kilmartin Glen, in Mid Argyll (Fig. 17.1), is a long, narrow, north-east to south-west-aligned valley adjacent to Scotland's west coast.

Figure 17.1: Location of Kilmartin Glen and its prehistoric monuments (from Cook et al. 2010); additional cists are shown on Fig. 17.7. Note: Dunadd Fort dates to the 1st millennium AD but is the findspot of a Late Neolithic carved stone ball



Bounded by steeply-sloping hills on its west and east sides, it narrows at its northern end where a natural plateau of fluvioglacial sands and gravels at Upper Largie overlooks the rest of the Glen, and broadens at its southern

end towards what is now an extensive area of wetland, the Mòine Mhór, with the southern horizon defined by the hills of north Knapdale. Its dramatic topography (Fig. 17.2) makes it an ideal location where the relationship between



Figure 17.2: Looking south-east down Kilmartin Glen towards Loch Crinan and Jura, with Kilmartin village in the foreground. Three of the cairns in the Early Bronze Age cemetery are visible, running roughly parallel to a field boundary (photo: David Lyons, reproduced by permission of Kilmartin House Museum)

the world of the living and the Otherworld of the dead, the divine, and other supernatural forces could be played out in prehistory. Its orientation lends itself to the observation of significant solar and lunar events (Ruggles 1999; Scott 2010), and the Upper Largie terrace and the flattish valley bottom provide complementary locales and natural stages for viewing celestial phenomena, for performing ceremonies (both diurnal and nocturnal), and for constructing visually striking monuments. It is as a ceremonial landscape that Kilmartin Glen is justly famous, there being no firm evidence for settlement structures there between the 4th and the late 1st millennium BC even if, as seems likely, people were living and farming nearby (Tipping *et al.* 2011).

The Glen's wealth of upstanding prehistoric monuments (RCAHMS 1988) has attracted a huge amount of attention over the last two centuries, ever since the early 19th century agricultural improvements started to drain its wetlands, as documented in William Daniell's romantic landscape engraving of 1817 (Fig. 17.3). Recent publication of the results of fieldwork at Upper Largie, undertaken since 1982 in response to gravel quarrying – one of a number of factors that has damaged the Glen's archaeology over the years – has revealed many additional monuments and features,

none visible on the surface (Cook *et al.* 2010). These include a post-defined cursus, an 'avenue' (probably post-built), a timber circle, a grave that is likely to be one of the earliest Beaker graves in Britain, and an adjacent and later grave containing a Food Vessel with both Irish and Yorkshire design features (see below). This contribution aims to build upon the themes explored in that publication to enhance our understanding of the people who used the Glen from the 4th to the 1st millennium BC, and to set the prehistoric archaeology of this area within the broader context of developments in western Scotland and farther afield. It will emphasise the importance, and the changing nature, of external connections for the people who built and used the monuments here. This undertaking benefits from the results of other recent work in and around the Glen, notably Andy Jones' *Animate Landscape* research project on rock art in the adjacent Kilmichael Glen (Jones *et al.* 2011), which includes important new palaeoenvironmental research by Richard Tipping (*et al.*). It also draws upon Douglas Scott's recent archaeoastronomical research in Kilmartin Glen (Scott 2010); on Trevor Cowie and Stuart Needham's re-evaluation of an engraved slab from Ri Cruin (Needham and Cowie in press); and on the National Museums' Scotland (NMS) radiocarbon dating



Figure 17.3: Engraving by William Daniell, 1817, showing Temple Wood South stone circle in the foreground, Nether Largie South and the Nether Largie stone setting. Peat-cutting and transportation are also depicted (copyright RCAHMS; reproduced under licence)



programme, which has produced dates for monuments within the Glen and for similar monuments elsewhere (Sheridan 2008a).

All the radiocarbon dates cited here have been calibrated using OxCal 4.1 and are cited at their 2 $\sigma$  calibrated values.

### **A chronological narrative for Kilmartin Glen: what happened when, where and why?**

#### ***Earliest activity***

The earliest evidence for human activity in the Glen consists of just four truncated pits on the Upper Largie terrace, together with a single piece of struck flint of possible Mesolithic date found at Slockavullin, on the valley floor (Cook *et al.* 2010, 167–9, 193). The pits produced no artefacts, but oak charcoal from one produced radiocarbon dates ranging between 5570 $\pm$ 70 BP (GU-9376) and 5530 $\pm$ 75 BP (GU-9374: *ibid.*, table 1). Allowing for the possibility of an ‘old wood’ effect, a calibrated date within the last quarter of the 5th millennium BC seems likely. These pits have tentatively been interpreted as a temporary hunting camp of Mesolithic hunter-gatherer-fishers, relatable to a broader wider picture of Mesolithic activity on the Argyll coast and Inner Hebrides. This

activity is broadly contemporary with evidence for small-scale opening of the woodland cover, and grazing of grassland, in the neighbouring Kilmichael Glen (Tipping *et al.* 2011, 160).

#### ***Early Neolithic activity, 38th/37th century BC–c. 3500 BC***

The earliest evidence for recognisably Neolithic activity in Kilmartin Glen (Fig. 17.4, 1) consists of a post-defined cursus on the Upper Largie terrace, with a cluster of truncated but potentially contemporary post-holes nearby, and a megalithic chamber tomb of ‘Clyde cairn’ type at Nether Largie South, on the valley bottom. What may be a second, narrower cursus, at the other end of the Glen on a northern terrace of the River Add, around 800 m from Dunadd (NR 84531 93380; National Monuments Record for Scotland (NMRS) No. NR89SW 53), is known only from an aerial photograph (E. Campbell 1996. Note that the NMRS record labels this as a ‘long barrow’, but there are no grounds for identifying it as such).

The Upper Largie post-defined cursus, described in detail in Cook *et al.* 2010 (169–74, 193–5), consists of two slightly divergent lines of oak posts, running north-north-east to south-south-west and up to c. 45 m apart. The excavated part extends for 88 m and includes a

squarish U-shaped terminal at the south-west end. Judging from a 1988 aerial photograph (*ibid.*, fig. 4), it may originally have run for *c.* 380 m along the terrace, kinking and narrowing to *c.* 30 m, and terminating in a squared north-east end. This can only be verified, however, through further survey and excavation. The excavated evidence indicated that at least some of the posts had been burnt, and oak charcoal from nine of the post-holes produced radiocarbon dates ranging between  $5375 \pm 55$  BP (GU-9366, 4340–4050 cal BC) and  $4840 \pm 50$  BP (GU-9369, 3750–3390 cal BC) but mostly clustering towards the earlier part of this range. Allowing for the possibility of an ‘old wood’ effect, the most likely construction date lies between *c.* 3800 BC and 3650 BC (*ibid.*, 194; cf. Ashmore 2007, 249). The presence of this monument implies that the terrace was largely tree-free at this time. As with other post-built cursus monuments in Scotland (Thomas 2007), its deliberate burning down would have formed an integral part of its meaning, and this would have constituted a striking spectacle in the Glen, especially if carried out at night. Its construction and destruction marks the first of many actions in Kilmartin Glen that were concerned with relationships between the living and the Otherworld. As with other cursus monuments in Britain, the associated ceremonies are likely to have involved procession along its length (Bradley 1993, 50–62), and this would have afforded extensive views down the Glen. Whether these ceremonies also involved marking specific celestial phenomena is uncertain, although Douglas Scott (who spotted the north-east part of the cursus on the aerial photograph) has demonstrated a potential lunar alignment: the southern, excavated section aligns on the position where the southern moon would have set, near the top of Barnasload hill, during a major standstill and the northern section could mark the position of the setting moon a day or so earlier (Cook *et al.* 2010, 194–5). If these alignments were deliberate, this would constitute the earliest example in a long and varied series of astronomical alignments in the Glen’s monuments.

Little can be said about the second putative cursus at the other end of the Glen, since its identification needs to be tested through fieldwork. According to its NMRS entry, it comprises two 1–2 m wide ditch-like features,

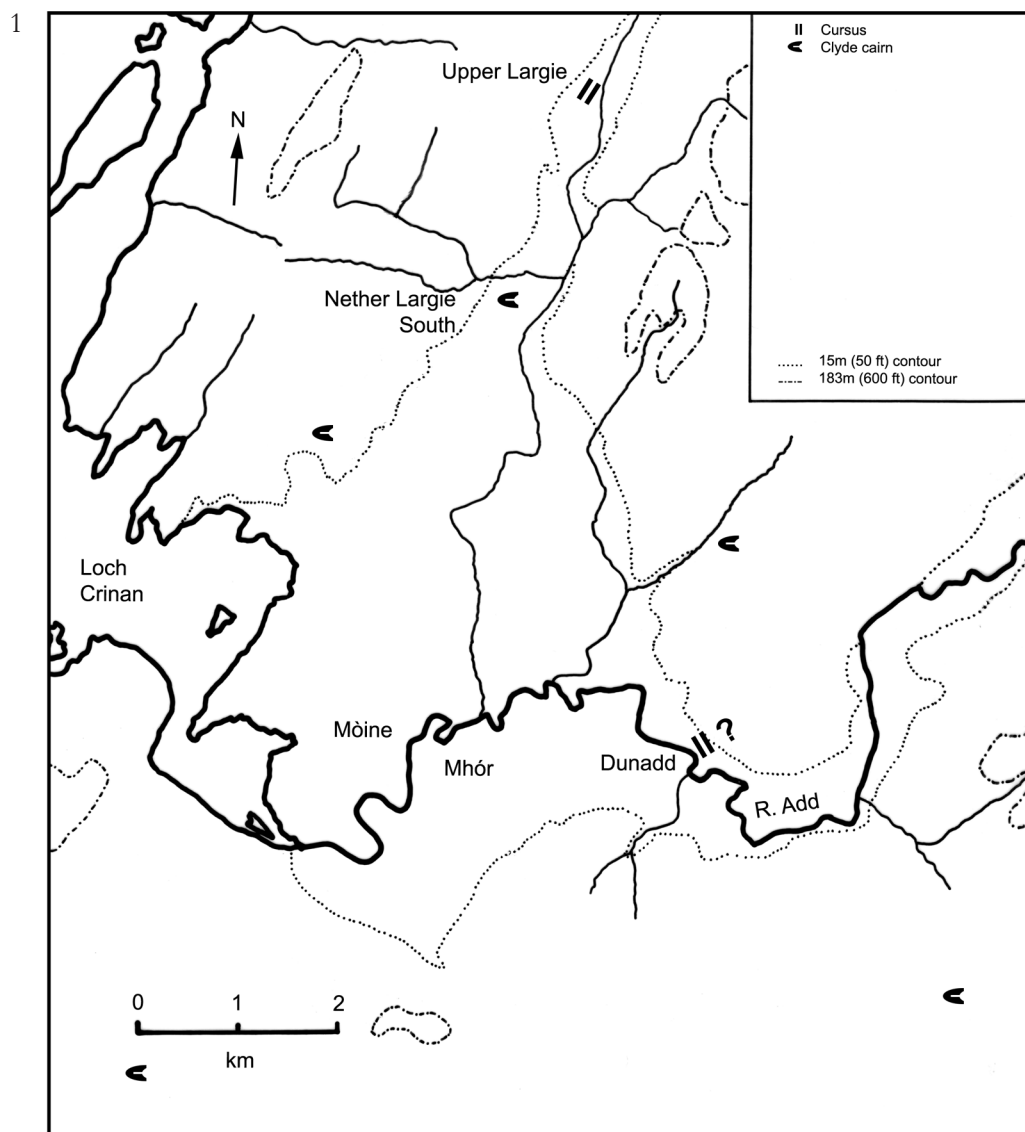
10–15 m apart, running roughly south-east for 150 m and ending in a curved terminal at the south-east.

We are on safer ground with the Clyde cairn at Nether Largie South, which has been described in detail by Audrey Henshall (1972, 335–40; cf. RCAHMS 1988, 48–51) and had been excavated by Canon Greenwell in 1864 (Kinnes & Longworth 1985, 152, UN 137). This comprises a chamber divided into four segments by septal slabs and overlapping wall-slabs, with two tall portal stones at its north-east (entrance) end. Whether it had had a façade cannot be determined, as the area in front of the entrance is obstructed by cairn material. The chamber is set within a circular cairn that had measured 134 feet (*c.* 47 m) in diameter when Greenwell excavated the site but is much smaller now; two short cists of probable Early Bronze Age date had been exposed in the cairn before Greenwell’s excavation, and there is abundant evidence for the Chalcolithic or Early Bronze Age re-use of the chamber. Indeed, it may well be that the cairn’s circular shape relates to its remodelling during the late 3rd millennium, to make it resemble the large Early Bronze Age cairns that were being erected along the valley floor at that time; it could originally have been rectangular or trapezoidal. The Neolithic finds include parts of two pots, one of which is a distinctive, fine carinated bowl with a vertical neck, heavy hooked rim, and incised linear decoration (Kinnes & Longworth 1985, UN 137, 12). Unfortunately, the human remains appear to have been lost, and there is no scope for direct dating of this tomb; however, important comparative dating evidence is available for the pot (see below), suggesting that it could have been deposited in the chamber around 3600–3500 BC, and it may well be that the monument was constructed during the 37th century BC.

It therefore appears that Kilmartin Glen was being used for ceremonies involving at least one linear monument (ie, the Upper Largie cursus) during the 38th or 37th century BC, and for the interment of the dead in a megalithic chamber tomb of Clyde cairn type, probably during the 37th/36th century BC. How does this fit in with our broader understanding of the Early Neolithic in the west of Scotland?

As discussed at length elsewhere (eg, Sheridan 2010, *contra* Whittle *et al.* 2011), the Neolithisation of this part of Scotland appears

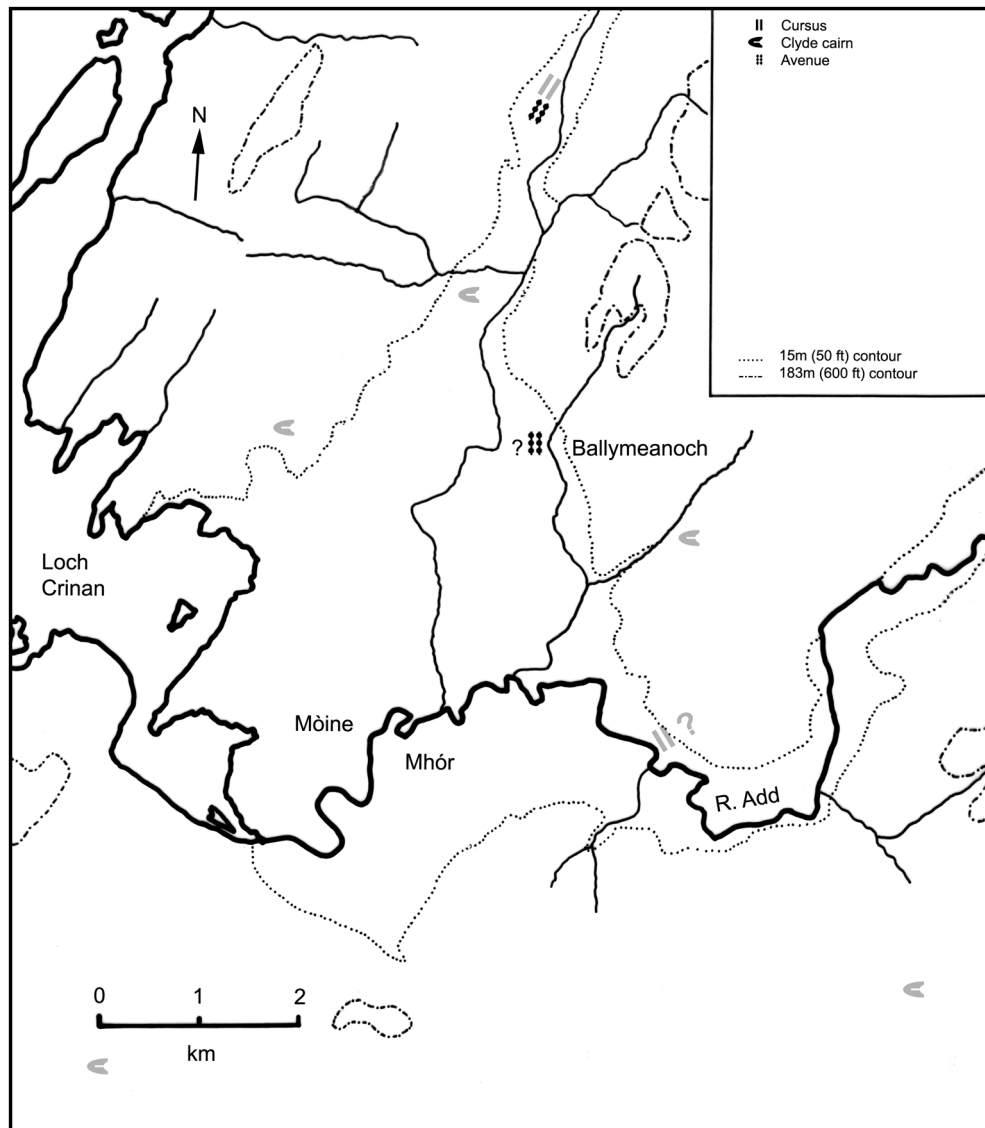
Figure 17.4: 1. Early Neolithic sites in and around Kilmartin Glen; the putative cursus at Dunadd is also shown as possibly belonging to this period. 2. (opposite page) The 'avenues' at Upper Largie and Ballymeanoch, of uncertain date; Early Neolithic sites also shown. (Figures 17.4–17.8 after RCAHMS; reproduced under licence)



to have involved two discrete 'strands' of colonisation by small farming groups from northern France, with one arriving from the Morbihan region of Brittany, up the Atlantic façade, some time between 4300 BC and 4000/3900 BC, and the other – the 'Carinated Bowl (CB) Neolithic' – arriving between 4000 BC and 3800 BC, having come probably from the Nord-Pas de Calais region and affecting large parts of Britain and Ireland (Sheridan 2007a). Both strands introduced entirely new practices, traditions, and beliefs to these islands. The former brought the practice of constructing small closed polygonal megalithic chambers and simple passage tombs, and of using Breton

style pottery (notably Late Castellar pottery), as seen at Achnacreebeag, around 40 km up the coast to the north of Kilmartin Glen (Ritchie 1970). The latter brought a different ceramic tradition, representing a fusion of north French Chassey and Michelsberg styles, together with a funerary tradition which – elsewhere in Scotland, at least – involved the use of non-megalithic monuments (including some with long mounds) and a range of habitation structures, including rectangular houses of various sizes, and smaller, more ephemeral structures (Sheridan 2007a). Our putative 'CB Neolithic' settlers probably arrived in the west of Scotland *via* the east coast of Scotland, there being no evidence for a northerly spread of

2



this strand of Neolithisation up the Atlantic façade.

These two strands of immigrants and their descendants took root and flourished, presumably intermixing sooner or later with the indigenous hunter-gatherer-fisher communities (Milner 2010), and also interacting with each other (and with farming communities elsewhere), while maintaining a degree of separate identity. This process can be traced not only in the development of funerary monument traditions but also in material culture, as discussed, for instance, by Henshall (1972, 280) and Henley (2004).

There is no evidence for the earliest Neolithic, of either of these traditions, in

Kilmartin Glen. Indeed, as far as the Breton 'strand' is concerned, the closest simple passage tomb is at Achnacreebeag itself, unless one accepts the RCAHMS' tentative identification of a badly-damaged monument at Pointhouse, on the west shore of Loch Fyne around 12 km to the east of the Glen, as a passage tomb (RCAHMS 1988, 51; cf. Henshall 1972, ARG 12). There is, however, evidence for the earliest 'CB Neolithic' strand in the region, in the form of two small huts – possibly used during summer upland grazing – on a platform on the slopes of Glendaruel at Auchategan in Cowal, just over 20 km to the south-east of Kilmartin Glen (Marshall 1978). The assemblage here includes artefacts



of Arran pitchstone, two axeheads of Great Langdale tuff (Clough & Cummins 1988, 233, ARG 5, 6), and 'traditional CB' style pottery including one vessel which, if found in or around northern France, would be classed as a classic Michelsberg 'tulip Beaker' (Scott 1978, fig. 11). The imported lithics attest to the rapid establishment of networks of contacts among 'CB Neolithic' settlers (as discussed in Sheridan 2007a) – an important element in establishing a viable 'breeding population', although it may not have been articulated in such terms at the time.

The megalithic chamber tombs in the area around Kilmartin Glen also belong to the 'CB Neolithic' tradition, and represent a translation into stone of its simple rectangular timber mortuary structures – initially as simple stone chambers (as at Ardnadam, Mid Argyll: Henshall 1972, 331, 333), and subsequently as the more complex structures that define the 'Clyde cairn' tradition of western and south-west Scotland (*ibid.*, map 3), with congeners in the court tombs of northern Ireland (Scott 1969). It is to the Clyde cairn tradition that the Nether Largie South monument belongs; it had probably been constructed by the descendants of the initial 'CB Neolithic' settlers, a few generations after their arrival in the region. It forms part of a cluster of seven Clyde cairns in the area (Henshall 1972, map 3; five of these are shown in Figures 17.4–17.8), and it provides clues as to the external connections of its builders. Architecturally it suggests that these people were part of an interaction network extending over parts of western and south-west Scotland and northern Ireland. Ceramically, however, it also suggests connections to the north and north-east: the distinctive pot mentioned above, which can be understood as a developed form of 'CB pottery', finds close parallels not only in another Clyde cairn (at Glenvoidean on Bute: *ibid.*, 302, 303, 306) and among other assemblages of what Jack Scott termed 'Rothesay style' pottery in south-west Scotland (Scott 1977), but also in a passage tomb at Achnacree, not far from Achnacreebeag, thereby illustrating the inter-group sharing of design ideas referred to above. A more distant link is offered by another strikingly similar pot from a domestic context at Culduthel, Inverness, at the other end of the Great Glen (Sheridan forthcoming). This find is significant

not only because it joins other evidence suggesting Early Neolithic movement along the Great Glen (eg, Antrim porcellanite axeheads: Sheridan *et al.* 1992, fig. 6), but also because it provides a date for this specific pot style and, by extension, for the use of the Nether Largie South monument, being associated with short-lived species charcoal dating to  $4780 \pm 30$  BP (SUERC-17222, 3640–3520 cal BC). This date is closely comparable with others that have been obtained from human bone found in the Clyde cairns at Torlin and Clachaig on Arran (Schulting 2004, 167; Sheridan & Schulting 2006, 205), supporting the idea that this type of monument was in use during the second quarter of the 4th millennium.

The Upper Largie cursus also belongs to the 'CB' tradition, since elsewhere in Scotland this type of structure is associated with 'modified CB' pottery (eg, at Holywood, on the outskirts of Dumfries: Thomas 2007, fig. 23.1) and with similar radiocarbon dates to those of Upper Largie (*ibid.*, fig. 27.5). Indeed, it appears that cursūs originated in Scotland, perhaps as aggrandised versions of mortuary enclosures (Bradley 2007, 68–9). While the Upper Largie cursus constitutes a significant outlier to the distribution of such monuments (Brophy 1999, fig. 11.1), its presence suggests that its builders could well have been in contact with their counterparts who built the cluster of cursus around Dumfries (and perhaps also with those who built one at Drybridge, Ayrshire: *ibid.*, 122). Furthermore, the discovery of an Arran pitchstone flake of possibly Early Neolithic date in topsoil at Upper Largie (albeit not directly associated with the cursus) reminds us of another external link, direct or indirect, with an area to the south (Cook *et al.* 2010, 175 and fig. 13, SF4).

This evidence for Early Neolithic activity in the Glen gives the impression of small, settled agricultural communities who lived in the vicinity of Kilmartin Glen (as confirmed by the palaeoenvironmental evidence from the neighbouring Kilmichael Glen where 'the evidence for crop-growing [of barley] is very strong from an interpolated age of *c.* 3600 cal BC': Tipping *et al.* 2011, 167). These people participated in networks of contacts that linked them – directly or indirectly – with areas to the north and south along the Scottish coast; to north-east Ireland; and up the Great Glen to north-east Scotland. Their ceremonies

– involving the building and use of the Clyde cairn, and the construction, use, and destruction of the cursus – will have provided a focus for interaction, bringing people together (possibly in fairly large numbers, as far as the cursus was concerned) and cementing their sense of family and group identity.

### **Middle Neolithic activity, c. 3500–c. 3000 BC**

There is currently no unequivocal evidence for activity in Kilmartin Glen during this period, even though the pollen record for the neighbouring Kilmichael Glen indicates a continuation of farming activity in that area (Tipping *et al.* 2011, 161). As discussed elsewhere (Cook *et al.* 2010, 174, 196), there is a slight chance that an ‘avenue’ at Upper Largie (Fig. 17.4, 2) could date to the second half of the 4th millennium; the same may be true of a second ‘avenue’ at Ballymeanoch, on the floor of the Glen, running north–south (*ibid.*, 195; Abernethy 1995). The Upper Largie ‘avenue’ consists of two parallel lines of pits running north–north-east to south–south-west for up to c. 40 m; at least some of these pits probably held posts. It is on a similar alignment to the excavated part of the cursus, and indeed its western line extends the east arm of that monument. This juxtaposition of an ‘avenue’ and a cursus is echoed at Holm, Dumfries & Galloway (Thomas 2007, 211–5). The dating of the Upper Largie ‘avenue’ is problematical. A radiocarbon date of  $5220 \pm 50$  BP (GU-9780, 4230–3960 cal BC), obtained from a piece of oak charcoal – the only datable material to be found – cannot be taken to date its construction as the sample came from close to the cursus and may derive from its burning. The Ballymeanoch ‘avenue’, discovered through geophysical prospection, similarly yielded no clear dating evidence when a 50 x 1 m trench was excavated (Abernethy 1995). All that was revealed was a shallow ditch which may have held a palisade. Therefore, even though both these ‘avenues’ provide us with further examples of linear, aligned monuments in the Glen – with the Ballymeanoch ‘avenue’ sharing its alignment with one of the Middle Bronze Age short stone rows nearby – they can only ‘float’ in time. *Comparanda*, of varying degrees of closeness, range from the late 4th to the early 2nd millennium BC (Cook *et al.* 2010, 202; Bradley 2006; 2011).

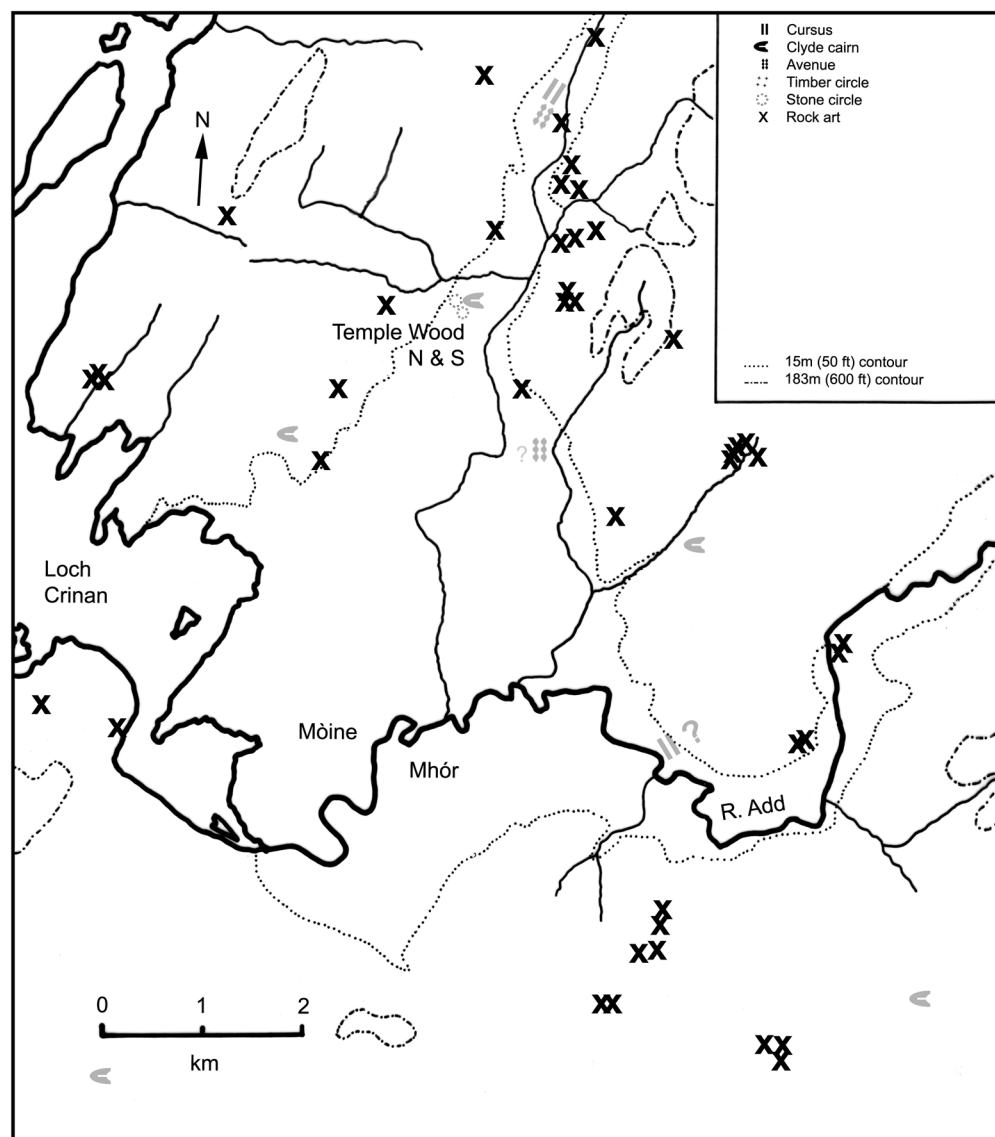
### **Late Neolithic activity, c. 30th–25th centuries BC**

This period witnessed significant novelties in ritual practice and material culture in Kilmartin Glen, all resonating with developments elsewhere. These can be summarised as follows (and see Fig. 17.5):

1. The construction, at Temple Wood, of a timber circle, followed by a stone circle on the same site (Temple Wood North) and a second stone circle nearby (Temple Wood South), the latter including one stone with a pecked spiral design and another with concentric rings (see Scott 1989 for a detailed description);
2. The pecking of rings and lozenge designs on slabs of stone that probably originally stood as orthostats – perhaps even associated with one or other of the Temple Wood circles or similar monuments (see below) – but were subsequently reused in Early Bronze Age funerary monuments, at Nether Largie North and (just to the south of the Glen) Carn Bàn and Badden (RCAHMS 1988, 57, 70, 75; M. Campbell *et al.* 1961). The Ri Cruin pillar stone (see below and Needham & Cowie in press) might also have started its life at this time;
3. The pecking of designs – mostly, but by no means exclusively, cupmarks and cup-and-rings – on rock outcrops, with Kilmartin Glen and its environs having the highest concentration of such ‘rock art’ in Britain (RCAHMS 1988; Bradley 1997; Beckensall 2005; Jones *et al.* 2011);
4. The use of a novel type of artefact, namely the carved stone ball, as found at Dunadd (RCAHMS 1988, 7), one of a handful known from Argyll (Marshall 1977; 1983). These Argyll carved stone balls may well have been made in Aberdeenshire (where this type of object may well have originated), perhaps reaching Argyll via the Great Glen (where one has been found: Marshall 1977). A similarly novel artefact, a pestle-shaped macehead, was found at Tarbert, a few kilometres to the south of Kilmartin Glen (Anon 1968, 202).

Additional evidence for activity in the Glen at this time comes from two pits on the Upper Largie terrace, one of which is associated with radiocarbon dates calibrating to between c. 2900 BC and c. 2500 BC, and the other with

Figure 17.5: above :  
Kilmartin Glen environs  
during the Late  
Neolithic; below: the  
decorated stones that  
were probably created  
at this time and later  
reused, at (left to right)  
Netber Largie North,  
Carn Bàn, and Badden  
(copyright RCAHMS,  
reproduced under licence)



two end scrapers of non-local flint, possibly from Yorkshire (Cook *et al.* 2010, 174–5). The possibility that the ‘avenue/s’ might date to this period has been mentioned above.

Space does not permit a detailed discussion of the dating of the Temple Wood circles, or of the rock art. Regarding the former, suffice it to say that even though there is no reliable

direct dating evidence for their construction, despite Scott's attempts at radiocarbon dating this (Scott 1989, appendix C), a date within the first two centuries of the 3rd millennium can be proposed. This is because the circles can be understood as part of the southward spread of a practice that may well have originated in Orkney with the erection of the Stones of Stenness around the 30th century BC, with the Temple Wood circles forming part of an Atlantic façade arc with Callanish on Lewis and Machrie Moor on Arran (Sheridan 2004) and now, thanks to a recent discovery, with a timber-then-stone circle at Armadale on Skye (Peteranna 2011 and pers. comm.). Furthermore, the close resemblance between the spiral motif on the outer (northerly) face of stone 9 in Temple Wood South and that seen (*inter alia*) on the elaborately-decorated ovoid macehead from Knowth passage tomb in the Boyne Valley would not be at odds with such a dating, given our understanding of the chronology of that monument (Scott 1989, pl. 5 and fig. 13; Schulting *et al.* forthcoming).

As regards the dating of the rock art on the outcrops, the radiocarbon date of  $4260 \pm 30$  BP (SUERC-29230, 2920–2760 cal BC) from charcoal associated with hammerstones in a sealed context at Torbhlairen (Jones *et al.* 2011, 57–8) is consistent with dates of *c.* 2900–2600 BC obtained at Backstone Beck on Ilkley Moor, where the rock art was associated with Grooved Ware pottery (Edwards & Bradley 1999). Furthermore, the recent discovery of cup-and-ring-marked 'rock art' at the Ness of Brodgar, in Orkney (Card and Thomas in press), again with a Grooved Ware association, is arguably not inconsistent with such dating. Whether the Kilmartin Glen rock art was contemporary with the construction of the Temple Wood circles, or slightly post-dates them, cannot however be determined.

What unites the phenomena listed above is the fact that they are symptomatic of the widespread sharing and rapid spread of ideas, beliefs, practices, and objects around Britain and Ireland towards the end of the 4th millennium and during the first half of the 3rd millennium. The use of Grooved Ware pottery is another facet of this, and although no Grooved Ware has (yet) been found in Kilmartin Glen, the lozenge designs on the Carn Bàn and Badden slabs are a classic feature of early Grooved Ware, being found on vessels as far apart as

Pool on Sanday (MacSween 2007), Walney Island in Cumbria (Manby 2007, fig. 4.7.4) and Coole Upper, Co. Cork, in south-west Ireland (E. Lynch, pers. comm.), for example. As many have previously observed (eg. M. Campbell *et al.* 1961), the lozenge designs as seen on the Carn Bàn and Badden stones and on Grooved Ware may well represent the adoption of one element of Boyne Valley 'passage tomb art', along with whatever symbolic meaning this motif had possessed (cf. Shee Twohig 1981); once more, a date for their execution within the first two centuries of the 3rd millennium seems plausible. Indeed, the possible connection between the three slabs listed above and the Temple Wood circles is worthy of further investigation, not least because the dimensions of the Badden slab match those of the socket for the central recumbent stone at Temple Wood North (Scott 1989, fig. 16).

The dynamics of, and reasons for, this widespread sharing of ideas, beliefs, practices, and objects are complex and space does not permit a detailed discussion (but see, for example, Bradley 1993; 1997; 2007, chapter 3; Sheridan 2004; and Schulting *et al.* 2011.) Briefly, we seem to be dealing with the widespread adoption of elements from a theocratic power system that had developed in Orkney around the 31st century BC. This system had been shaped by the deliberate adoption of practices and ideas (such as the use of the spiral motif/symbol, used in some Maes Howe-type passage tombs) from the Irish centre of power in the Boyne Valley, as part of the elite's strategy of 'cosmological acquisition' (Helms 1993). By the time that other people started to emulate (or participate in) it, it had developed a distinctively Orcadian 'vocabulary' of ceremonial practices and material culture, including the construction of the Stones of Stenness stone circle and henge, and the use of Grooved Ware pottery and of various types of stone macehead. It is within this process that we can understand the appearance of the novel monuments and material culture (and the use of the spiral motif/symbol) in Kilmartin Glen.

Two questions remain: is the concern with marking significant celestial events, as evinced in Boyne Valley and Orcadian passage tombs, attested at Temple Wood and comparable timber and stone circles? And how does the practice of creating 'rock art' on outcrops fit into this scenario?



Much ink has been spilt over the question of the possible astronomical alignment of the Temple Wood circles, with Gerald Hawkins (2002, 97–102) arguing for both a lunar and solar alignment, for example. To cut a long story short, Clive Ruggles' more cautious approach (1999, 231, n.79) did not rule out the possibility of some celestial orientation, although he rightly pointed out that some of the claimed alignments are predicated on the contemporaneity of the circles with the Nether Largie stone setting – something that we can now clarify, since it is likely that the latter was erected over 1500 years after the circles. The latest evaluation, by Douglas Scott (2010), confirms the suggestion of both a solar and lunar orientation for the circles: when viewed from the northern circle, the southern circle seems to mark the setting midwinter sun (and the concentric circles and spiral on two of the stones could symbolise this), while the north-east alignment of the circles orientates to the rising major standstill midwinter full moon. While archaeoastronomers will doubtless continue to discuss this matter, it does indeed appear likely that the Temple Wood circles were constructed with a view to marking significant celestial events.

How the complex rock art on the outcrops of Mid Argyll fits within this scenario is another key question, especially since the tradition is not well represented in Orkney and probably did not originate there. Quite where it originated is a moot point (Bradley 1997, chapter 4), although it is clear that the motifs can be found among Irish passage tomb 'art', and rock art is well attested in Ireland, as well as in northern and western Britain, East Anglia (at Over, Cambridgeshire: <http://heritage-key.com/blogs/ann/neolithic-rock-art-discovered-cambridgeshire-quarry>), Wessex (Knowlton South Circle, Dorset: Lawson 2007, fig. 4.29) and Atlantic zones of France and Iberia (especially Galicia). As with the lozenges mentioned above, it appears that certain elements of the passage tomb 'art' repertoire were privileged, in this case as part of the open-air ceremonies through which people were communicating with Otherworldly powers. The creation of rock art seems to have been a way of making sense of the world, and an expression of a cosmological belief that is consistent with other evidence for a Late Neolithic concern

with the Otherworld – a concern that was expressed in different ways in different areas. The very wide distribution of complex rock art in Atlantic Europe – with similarities that cannot be explained by coincidence, as Bradley has pointed out (1997) – suggests the existence of overlapping networks of interaction that extended beyond Britain and Ireland during the early 3rd millennium BC, with some individuals undertaking long distance travel. Within this scenario, the external contacts of Kilmartin Glen during this period seem to have been along the Atlantic façade, and possibly up the Great Glen to north-east Scotland. A link with Yorkshire – probably indirect – is hinted at by the aforementioned artefacts of suspected Yorkshire flint.

### ***Chalcolithic activity, 25th–22nd centuries BC***

A new element in the long history of external contacts in the Glen was uncovered in 2005, when a continental-style grave with three international-style Beakers was discovered at Upper Largie (Fig. 17.6; Cook *et al.* 2010, 175–82, 197–8). The grave had comprised a wooden chamber set into the gravel, surrounded with a ring-ditch containing posts, and covered with a small cairn; an arc of further posts around the southern part of the ring-ditch may have been contemporary. Radiocarbon-dated to the 25th–24th century BC (including by hazel charcoal dating to  $3915 \pm 40$  BP, SUERC-15119), this is among the earliest Beaker graves in Britain. Its continental – and more specifically Dutch – affinities, and those of other early Scottish Beaker graves, have been discussed at length elsewhere (*ibid.* and Sheridan 2008b; cf. Fokkens 2012). This foreign and wholly novel form of funerary monument could indicate the arrival of a small group of travellers, whether they be in search of the copper which is known to exist around the Glen, or else undertaking the kind of heroic, long distance journey that seems to characterise the behaviour of some continental Beaker users around the 25th century BC (Salanova 2007). At any rate, its positioning on the Upper Largie terrace will have constituted a statement about the importance of the individual interred within.

There are hints that some other Beakers found in the Glen may pre-date the flurry of funerary activity of the 22nd century BC. These include fragments of a Maritime Beaker with

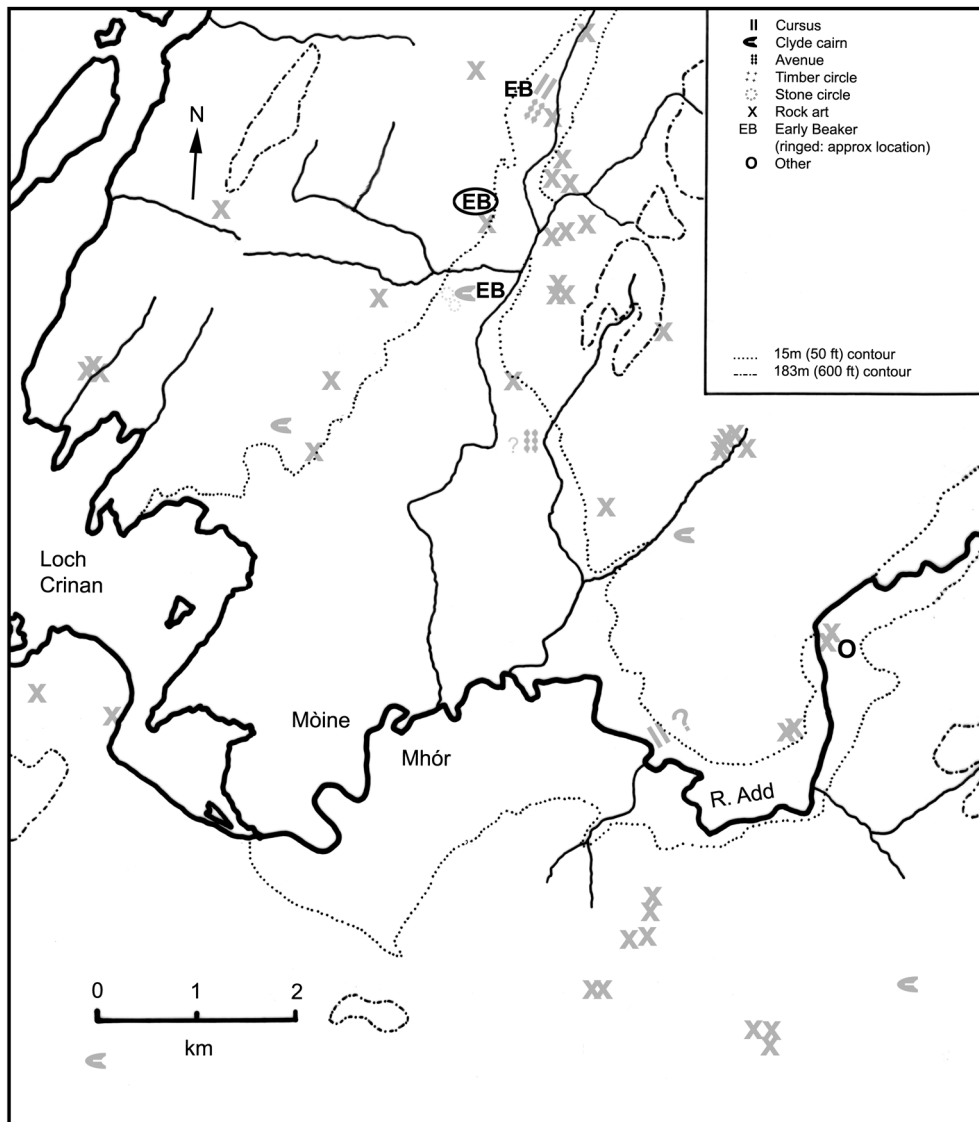


Figure 17.6: Kilmartin Glen environs during the Chalcolithic

cockle-shell impressions, and of an aa over cord-impressed Beaker, from the Paltalloch Estate (Clark 1970, 259; RCAHMS 1988, 20, fig. C), and of an All Over Cord-impressed Beaker from ‘?Largie’ (Clarke 1970, 529) – both probably found in graves. The tall mid-carinated Beaker from Nether Largie South chamber tomb (Henshall 1972, 302), and possibly also the other Beaker sherds from that tomb, could indicate its re-use for human interment around 2300 BC.

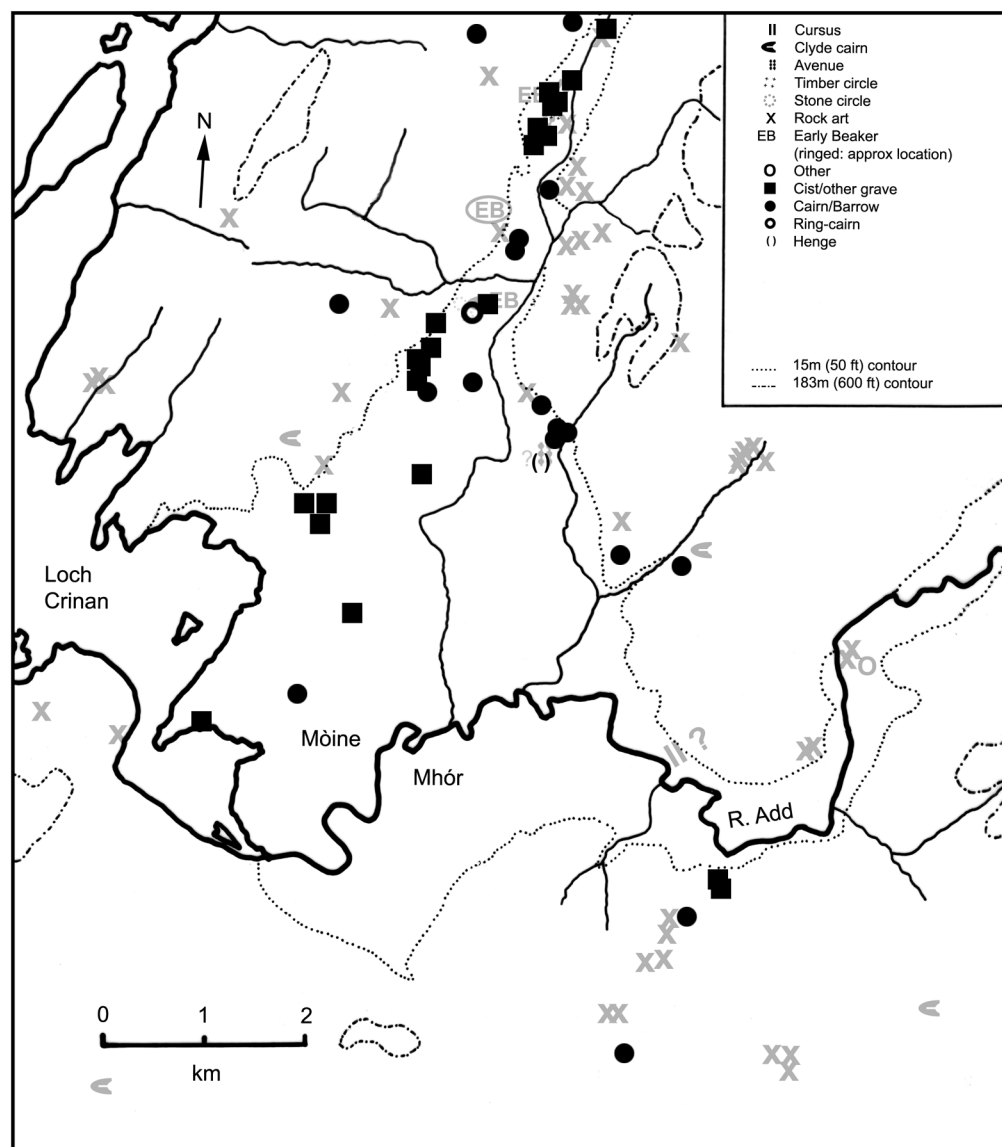
As for other activity in the area between the 25th and 22nd centuries BC, there is evidence from Kilmichael Glen suggesting possible interest in the Torbhlaren rock art site during this period, with a date of  $3975 \pm 40$  BP (SUERC-21622, 2580–2350 cal BC) for oak charcoal associated with a circular post-built

structure, subsequently sealed beneath a clay platform, beside one of the decorated outcrops (Jones *et al.* 2011, 54–58). While the possibility of an ‘old wood’ effect makes it hard to be sure whether this activity really pre-dates 2200 BC, it indicates an interest which, from the 22nd century, seems to have extended into re-using stretches of such rock.

#### ***The earliest Bronze Age activity, 22nd–19th centuries BC***

This period appears to have been a ‘golden age’ in Kilmartin Glen, and a time of obvious social differentiation, when much effort was expended on showing off the wealth of its elite (including, for the first time, women) in ostentatious and/or richly-equipped funerary monuments (Fig. 17.7). As argued elsewhere

Figure 17.7: Kilmartin Glen environs during the earliest Bronze Age



(eg, Cressey & Sheridan 2003, 80; Needham 2004), the basis for this wealth may well have been control over the flow of imported Irish metal to the bronze-working centres of north-east Scotland, via the Great Glen; this may have continued a pre-existing practice of importing Irish copper objects into Scotland.

Such is the wealth and complexity of the evidence relating to this period in Kilmartin Glen that it is hard to compress into the space available; only its main characteristics can be sketched here.

A key change was the reconfiguration of the landscape, to underline the status of the elite. This took several forms, most obvious of which was the construction of a linear – dynastic? – cemetery, originally comprising six large

(15–30+ m in diameter), imposing round cairns along the valley bottom (RCAHMS 1988, 14), and the probable remodelling of the Neolithic Nether Largie South cairn to integrate it within this cemetery. Other imposing cairns were also built in the area, including Dunchraigaig, on the eastern edge of the Glen, and Carnasserie to the north, with its commanding view down the Glen (*ibid.*, nos 48 & 35). The newly-built valley bottom cairns were designed to house just one or two individuals, in special and/or richly-equipped cists; in the case of the Kilmartin Glebe Cairn, for example, a female grave containing a jet necklace and a fine Irish-style Bowl Food Vessel had been surrounded by two concentric stone circles (possibly a ring-cairn) before being incorporated within a larger cairn

when a second cist was constructed to the north-east (*ibid.*, 64; Scott 1989, fig. 18).

The reconfiguration of the landscape included the remodelling of other ancient sacred sites, in addition to Nether Largie South. A stretch of outcrop with rock art was prised up, images of flat metal axeheads were superimposed onto the design, and the slab was used as the capstone for a massive cist under Nether Largie North cairn (RCAHMS 1988, 68–70). In similar fashion, the ‘pillar stone’ at Ri Cruin could have been taken from a pre-existing monument and, as Needham and Cowie have suggested (in press), its design converted into a halberd, for use in a cist. The Temple Wood South stone circle – which had probably already begun to be used as a funerary site, with the construction of cist graves A and (Beaker-associated) B outside the circle – was converted into a ring-cairn, complete with a central cist. The spiral design on stone 9 was extended onto the eastern face of the stone because the northern face became obscured by the cairn (Scott 1989, pl. 5). It may be that the stone with two pecked circles, found under the Nether Largie North cairn, was taken from this circle; its dimensions and style of decoration are consistent with such an interpretation. As suggested above (regarding the lozenge-decorated slabs from Badden and Carn Bàn), it seems likely that the Temple Wood North circle was dismantled at this time, and its stones deployed in cists elsewhere. The central cist in the Temple Wood South circle has ‘unnecessarily massive’ slabs (*ibid.*, 70), and one of the cists inside the Ballymeanoch henge has ‘unusually long side-slabs (up to 2.75 m: RCAHMS 1988, 52); in both cases their dimensions are comparable with those of the Temple Wood North circle stumps. If this hypothesis is correct – and it can be tested through ‘virtual refitting’ – then it also indicates that the Temple Wood North circle was taller than its southern counterpart.

The ‘vocabulary of esteem’ that the elite used to underline their status was varied. While the massive cairns are comparable to those seen elsewhere in Scotland at this time (eg, in Fife and East Lothian), and while the Temple Wood South and possibly Glebe Cairn ring-cairns echo the Clava ring-cairns at the other end of the Great Glen (Bradley 2000), the henge at Ballymeanoch – which was also probably constructed at this time – provides

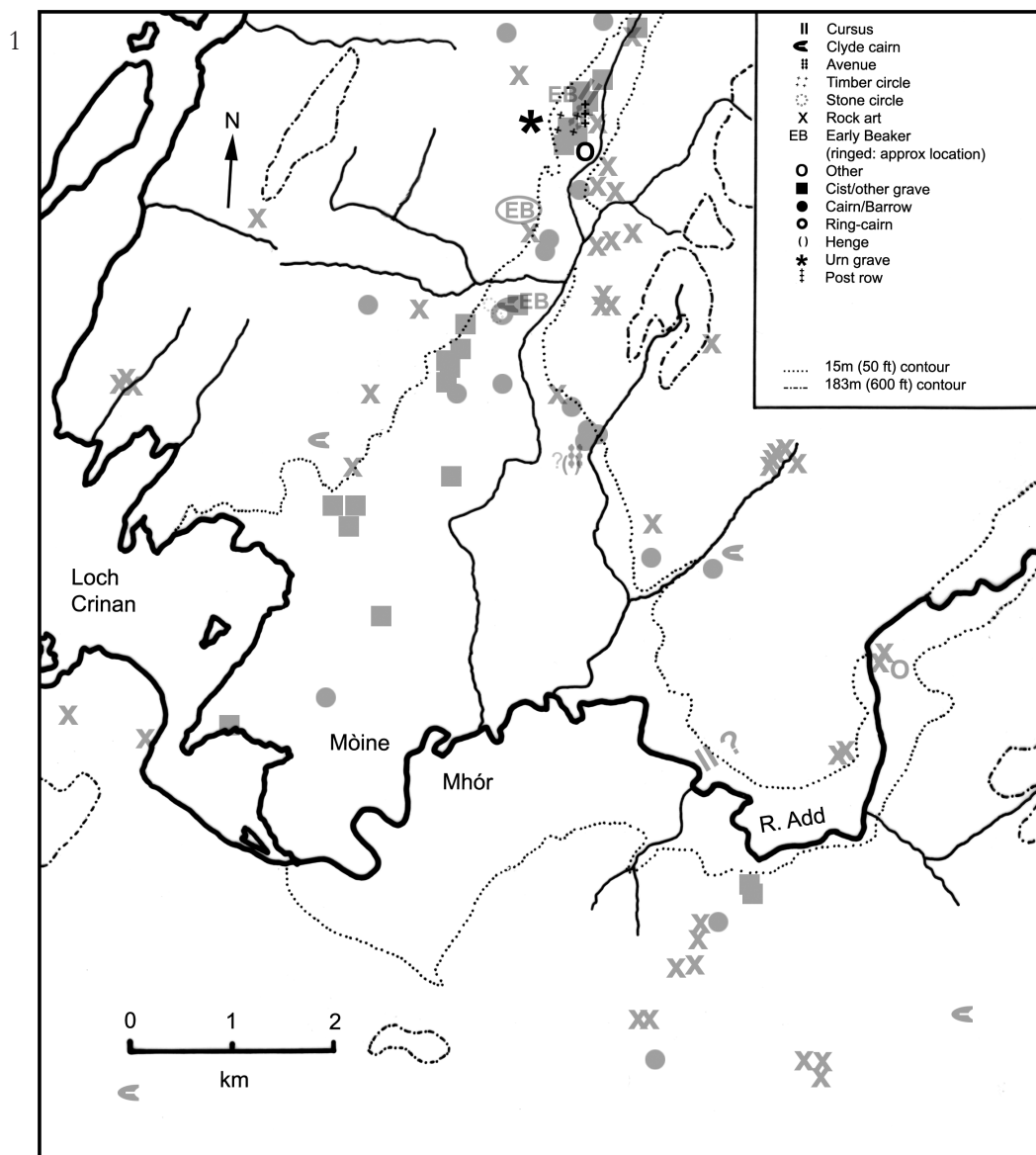
yet another external referent, and is a type of monument not otherwise attested in this part of Scotland (Barclay 2005). As with the ring-cairns, it may be that the idea of creating the henge was adopted from north-east Scotland, since we know from Richard Bradley’s work at Broomend of Crichton, Aberdeenshire, that the henge there was constructed between 2150 and 1900 BC (Bradley 2011, illus. 2.9). Such a date is not in conflict with the expected date of c. 2300–2000 BC for the long-necked Beaker (Kinnes & Longworth 1985, UN.134) found in one of the Ballymeanoch cists (cf. Sheridan 2007b). And elsewhere in the Glen, special status was denoted in other ways as well. At Upper Largie, this was arguably achieved by the deliberate positioning of an Early Bronze Age grave (probably featuring a plank-built ‘cist’) immediately next to the Dutch-style Beaker grave (Cook *et al.* 2010, 182–3). This grave contained a unique Food Vessel, combining elements of Irish design with the stumpy feet of a Yorkshire-style Food Vessel (*ibid.*, figs 14–15). Other individuals were distinguished by being buried in a rebated cist, or with precious grave goods such as spacer plate necklaces of Whitby jet, used to adorn women (Sheridan & Davis 2002; RCAHMS 1988, 82), or fine Food Vessels – a novel ceramic style, with some probably being made by specialist Irish potters. A dagger is reported to have been found in a grave at Ballymeanoch (RCAHMS 1988, 75), and a fragment of bronze was found in a cist at Potalloch (*ibid.*, 18), but neither can now be traced.

The external connections of the elite, as shown in their monuments and material culture, were multi-directional, with Ireland, north-east Scotland, and Yorkshire as significant axes. There was also maritime interaction with communities in west and south-west Scotland; although Kilmartin Glen seems to have been a centre for wealth, probably due to entrepreneurial skills in importing Irish metal, there were other parts of west and south-west Scotland who were also able to use a similar ‘vocabulary of esteem’.

Finally, it should be emphasised that not everyone who was buried in the Glen was a member of the elite; there are cists, some grouped into cemeteries and some covered by cairns, that are unremarkable in their construction and grave goods. The latter include Food Vessels that are not as skilfully



Figure 17.8: Kilmartin Glen environs during 1. The Early Bronze Age; 2. The Middle Bronze Age



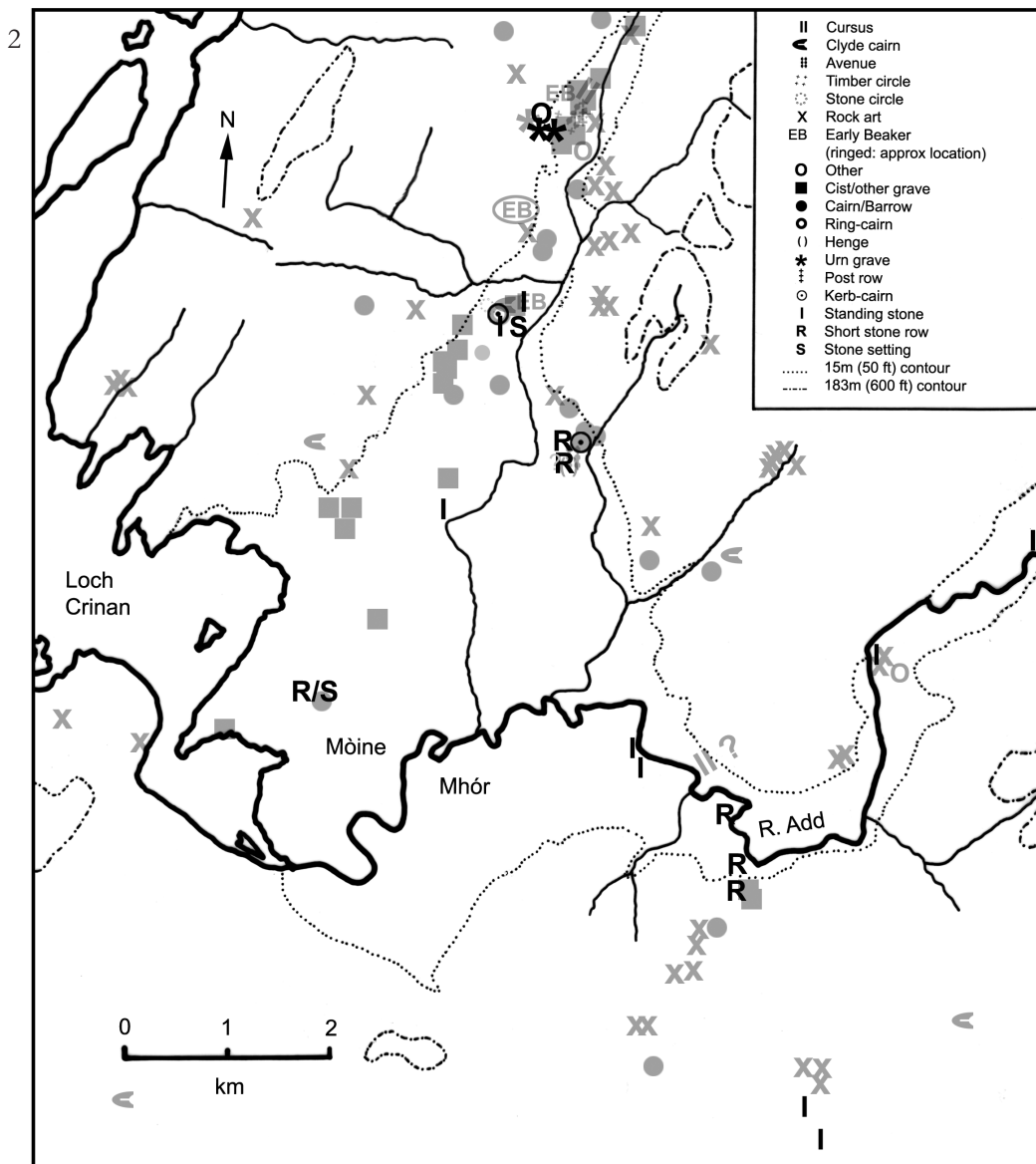
made as the finest examples (eg, from Cist 1 at Upper Largie: Cook *et al.* 2010, fig. 18). That Beaker pottery continued to be used alongside Food Vessels is clear from the date of  $3590 \pm 40$  BP (GU-9358, 2120–1780 cal BC), from unburnt bone from a cist at Upper Largie (*ibid.*, 186).

**Subsequent Early Bronze Age developments, c. 19th–15th centuries BC**

The use of the Glen as a place of burial continued, with one grave at Upper Largie containing cremated remains in a probable Collared Urn dated to  $3520 \pm 35$  BP (SUERC-16631, 1940–1750 cal BC: *ibid.*, 188) (Fig.

17.8, 1). This shift to the use of cremation as a funerary rite echoes developments elsewhere in Scotland at the time.

A slightly oval timber ‘circle’ was built on the Upper Largie terrace during this period (*ibid.*, 190–1, 202 & appendix). Four radiocarbon dates, all on oak, suggest that it was probably constructed between 1600 and 1400 BC (allowing for a possible ‘old wood’ effect) – that is, around 1500 years later than the suspected date for the Temple Wood North timber circle, and comparable with the date range of 1850–1500 BC suggested for the henge at Broomend of Crichton (Bradley 2011, illus. 2.9). Douglas Scott



has suggested that its major axis might have been aligned on midsummer sunrise (Cook *et al.* 2010, 202). The presence of a blade of Arran pitchstone in one of the post-holes, if not as a residual find, provides a reminder of external connections at this time.

Unless one counts the ‘avenue/s’ as discussed above, the only other structures that are likely to date to this period are: i) a ragged ‘line’ of five post-holes at the northern end of Upper Largie, running approximately north–south, and dated (from oak charcoal) to 1870–1650 cal BC (GU-15645, 3395±35 BP); and ii) a structure resembling a larger version of the early Beaker grave, with a central, large

roundish pit surrounded by a circle of pits or (more likely) post-holes (*ibid.*, 188–90). As discussed elsewhere (*ibid.*, 190), the radiocarbon dates suggest construction and re-use within the first half of the 2nd millennium.

#### ***Middle to Late Bronze Age activity, 15th–11th centuries BC***

This period saw continuing use of the Glen for the burial of cremated remains, and also a renewed concern with marking significant celestial events – the latter shown not only in the short stone rows and other standing stone settings in the valley bottom, but also in the kerb-cairns built at Temple Wood with their

south-east facing 'false portals' set into the kerbs, and at Ballymeanoch (Fig. 17.8, 2).

On the Upper Largie terrace, at least one grave featuring an inverted Bucket Urn has been found, and dated to  $3040 \pm 35$  BP (SUERC-16632, 1410–1210 cal BC); similar pottery was found elsewhere on the terrace (*ibid.*, 191–2).

In the valley bottom, the kerb-cairns represent a new form of funerary monument, discussed in detail by Lynch and Ritchie (1975) and found not only in Argyll but also central and north-east Scotland, Wales, and Ireland. These distinctive, low drum-shaped cairns may have been constructed over pyre sites; associated rituals included the smashing of quartz. Two were built inside the Temple Wood South circle: one was constructed immediately above the central Early Bronze Age cist, and the other, next to it, was used twice (Cook *et al.* 2010, 203–4). A kerb-cairn was also built beside the two short stone rows at Ballymeanoch. Ranging between  $3100 \pm 35$  BP (SUERC-17361) and  $3065 \pm 35$  BP (SUERC-17362), the three dates for cremated bone from the Temple Wood graves suggest their use between c. 1450 and 1200 BC. Very similar dates have also been obtained from cremated bone from kerb-cairns elsewhere in Argyll, at Claggan (cairns 1 and 3) and Strontoiller (Sheridan 2008a). The spatial proximity of the kerb-cairns to short stone rows at Ballymeanoch and Ardnacross, along with the regular south-easterly orientation of the 'false portal' feature in the kerb (where this survives), suggests that these two kinds of monument were conceptually linked.

The dating of the short stone rows – a type of monument whose Scottish examples cluster in the west (Ruggles 1999) – is based on a fragment of cremated bone, found below packing stones in the socket of a holed stone at Ballymeanoch (Barber 1978; RCAHMS 1988, 127–9; Sheridan 2005), which produced a date of  $2970 \pm 40$  BP (GrA-28613, 1370–1050 cal BC). The stone whose erection it dates represents the re-use of an ancient section of bedrock, adorned with rock art. The stone to had stood close to a pair of short stone rows, with slightly differing orientations. Clive Ruggles has convincingly argued that the short stone rows of Argyll marked the position of moonrise and/or moonset at its southern standstill position (Ruggles 1999, 109), and

that the slight discrepancy in the orientation of the Ballymeanoch rows was due to one row having been erected before the exact position of the moon had been adequately observed. Additional support for the idea that the short stone rows of the west of Scotland belong to the Middle Bronze Age is provided by a radiocarbon date of  $2880 \pm 60$  BP (OxA-3880, 1260–910 cal BC) obtained from charcoal in a stone hole at Ardnacross, Mull (Martlew & Ruggles 1996, 126).

It is tempting to assume that the more complex setting of stones at Nether Largie (RCAHMS 1988, 135–7) was contemporary with the Ballymeanoch rows. Like these, it incorporates ancient slabs of outcrop adorned with rock art. It also appears to show a concern with marking the position of the standstill moon (see Ruggles 1999, 62, 109–10 for a discussion and Scott 2010, on multiple lunar and solar orientations).

Further evidence supporting the idea that there was renewed interest in (and use of) ancient outcrops adorned with rock art is offered by the radiocarbon date of  $2980 \pm 30$  BP (SUERC-29238, 1370–1120 cal BC) from charred hazelnut shell associated with a deposit of hammerstones at Torbhlaren (Jones *et al.* 2011, 98).

Insofar as external connections at this period are concerned, they appear to be with other communities in the west of Scotland, but may have extended north-eastwards as well, as suggested by the distribution of kerb-cairns. The re-use of ancestral sacred monuments (ie, bedrock with rock art, and the Temple Wood South monument) echoes earlier Bronze Age practice.

It is at this point that the evidence for the use of the Glen ceases, with the best part of a millennium passing before the next signs of human activity. Late Bronze Age activity is attested outside the Glen in Mid Argyll, for example with the deposition of a metalwork hoard at Torran, a few kilometres to the north (RCAHMS 1988, 19). Whether this apparent cessation of activity in the Glen was due to increasingly wet conditions, with the expansion of the Mòine Mhór, remains one of many outstanding questions.

## Conclusions

In preparing this contribution, it has become

clear that writing a narrative for the long, complex and fascinating history of activities in and around Kilmartin Glen is hard to boil down to a succinct account. This is a testament to its wealth of archaeological material, and to the significant advances in our knowledge base that have been made in the last decade. There are clearly many outstanding questions; the current account can only give a snapshot of the most archaeologically visible developments, and the task for the future will be to fill in the detail. If permission to excavate some of the tantalising sites (eg, the Ballymeanoch henge) could be granted, then Professor Bradley would be most warmly welcome to come and sprinkle his customary archaeological magic over these venerable remains.

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## History-making in Prehistory: examples from Çatalhöyük and the Middle East

*Ian Hodder*

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*Through his fieldwork and writing on European prehistoric monuments, Richard Bradley has highlighted how material acts could create history and place. Here the theme of history-making is explored through the archaeology of the Early Neolithic settlement of Çatalhöyük in southern Anatolia. The process of memory construction is seen in varied material projects, including house building, burial and the retrieval of skulls and sculptures. It is argued that social organisation at the site was based around 'history houses' made up of groups of houses centered on a central house in which the dead were preferentially buried and ritual and symbolic markers were amassed. These houses acted to produce the long-term social relations and structures that are the hallmark of settled agricultural societies. It is also suggested that perhaps the whole town of Çatalhöyük was organised so that historical relations and connections could be charted. A wider review shows the pre-Neolithic and Neolithic societies of the Middle East and Turkey were increasingly concerned with temporal depth. Such practices began very early, and it seems likely that history-making was a necessary precondition for the formation of fully settled agricultural villages and the long-term, delayed-return economic systems that underpinned them.*

Of the many contributions Richard Bradley has made to the discipline that deserve celebration in this volume, the one on which I wish to concentrate is his demonstration, through numerous examples that archaeologists can explore the ways in which monuments, sites, and objects were used and re-used to construct social memory and history: that history-making could be observed in prehistory. Throughout a large part of his career (eg, Bradley 1987; 1998; 2002; 2003) he documented the ways in

which earlier monuments were re-incorporated into new social settings in European later prehistory. He showed how material acts could create history and place. It is to this aspect of his work that I wish to contribute by discussing evidence for history-making at the far-distant and earlier site at Çatalhöyük, although I will also argue that history-making was a key component of the even earlier processes that led to the domestication of plants and animals in the Middle East.

## Repetition and commemoration at Çatalhöyük

Repetitive patterning in, for example, the location of art, burials, obsidian hoards, ovens, and ladder-entries was identified in the houses excavated at Çatalhöyük by Mellaart (1967) in the 1960s but data were not collected at that time which would allow the study of artefact patterning on floors. But taking the past and present excavations together (Hodder 1996; 2000; 2005a–c; 2006; 2007; 2010; Hodder & Cessford 2004), there is evidence to suggest that as a child grew up in a house at Çatalhöyük, it would have learned that different types of people were buried beneath certain platforms, that different plasters were used for different platforms, that refuse was swept up more carefully from some areas, that different activities took place in different parts of the house.

It is important to distinguish habituated behaviour, involving the repetition of acts, from commemorative events involving specific social memories (Connerton 1989). In the former case, ritual and other acts may become routinised and codified but there is no specific memory of events and histories, while in the latter case a link is remembered to a specific event or person. There may also be community-wide memories embedded in daily practices and rules (everyone knows that the hearth is in the south of the house) without there being any specific memory of an individual house in which the hearth was in the south. So the onus is on the archaeologist to demonstrate specificity of memory construction.

Habituated behaviour at Çatalhöyük is seen in the exact building of one house on the walls of the preceding house (eg, Fig. 18.1). In most house sequences there is a remarkable degree of continuity in the placing of platforms and floor divisions through successive replasterings and rebuildings. Change does occur in the location of ovens and hearths, etc, and in terms of the overall cultural assemblage, but individual sequences often show continuity of placement of activities and features inside successive houses.

As well as habituated practices within successive houses, there are also examples of specific commemorative acts. For example, in Building 1 retrieval pit F.17 was dug to remove or retrieve a relief sculpture (only traces of

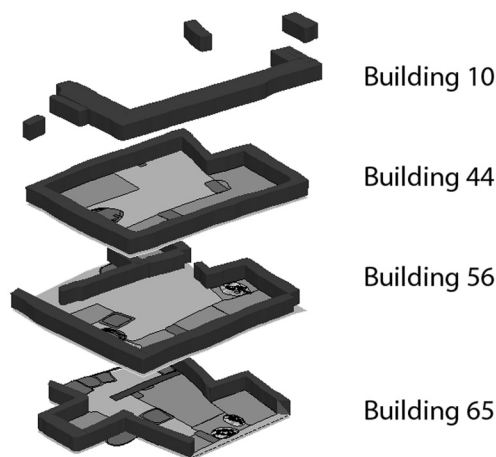


Figure 18.1: The sequence of Buildings 65, 56, 44 and 10. Source: Camilla Mazzucato and the Çatalhöyük Research Project

which remained on the wall) from the east face of the west wall in the main room (Hodder 2006). Given the large amount of erosion off the top of the mound that occurred in the millennia after the Neolithic occupation, we cannot know how deep these Neolithic ‘archaeologists’ had to dig, but it was at least 0.7 m and probably substantially more. We do know that Building 1 had been filled and that any digging down implies a precise historical memory even if embedded within wider knowledge about where important sculptures were generally placed. Not all houses have major relief sculptures on the west walls of main rooms.

The fact that the relief sculpture in Building 1 was not removed immediately, but after the house had been filled in, may suggest that time had to pass before it could be removed. This memory across several phases is seen in other examples. For example, Mellaart (1964, 70), discussed the depiction of a bull in his Shrine 8 in Level IX: ‘Once again the presence of a bull on the north wall of shrines in this position should be noted, for this is the third in succession (Shrines VI, 8, VII, 8, and IX, 8).’ Bulls are found elsewhere on northern walls, as in VI.10, but not on the eastern part of the north wall as in the Shrine 8 sequence. What is also remarkable is that this specific memory in Shrine 8 was retained across phases in which a totally different form of wall art was used. Despite a period in Levels VIII and part of VII with vulture paintings, the distinctive bull motif was returned to in Levels VII and VI. Memory was retained of an earlier arrangement of the house and was returned to.

In the same way that a pit was dug down



to retrieve a sculpture in Building 1, so pits were also dug to retrieve the heads of selected humans. In both Building 1 and Building 6 a skeleton was found buried beneath the house floors with its head removed and with traces of cut marks on the upper vertebrae. Andrews *et al.* (2005) suggest, on the basis of the completeness of the skeletons and the condition of the bones, that the bodies were buried with their flesh on, and that the head was cut off after a period of decay. Headless human corpses are frequently shown in the wall art, but few headless skeletons have been excavated by the current project. Most skeletons were found with head intact. It is possible that some special status was associated with the headless burials as the skeletons have been treated in distinctive ways (in Building 6, an unusual layout of the body and the placing of a cloth and plank over the torso). How were these heads reused? In the recent excavations, detached human skulls were found in foundation deposits and in structured abandonment deposits in Building 3 (Stevanovic & Tringham 1998). The removal and reuse of human heads suggests some attempt to construct links between social groups and specific ancestors, since heads were later removed from individuals who had been treated in special ways at death. It is the heads of these particular individuals that were chosen for head removal. It is these particular locations that were remembered. In Building 42 a plastered skull of a man was found (Hodder 2006) held in the arms of a woman in a remarkable grave (for example containing a leopard claw). This grave perhaps suggests the use of human skulls to create specific histories with past individuals.

### *The example of the Building 65-56-44-10 sequence*

Both habituated practices and commemorative memory are seen in the sequence of buildings identified as 65, 56, 44, and 10 in the South Area of the site, largely excavated by Roddy Regan (see Fig. 18.1.). Prior to the construction of the first building in this sequence (Building 65) the location was used for the inhumation of a series of neonates or very young children. What is remarkable about the sequence of buildings is the similarity of location of the internal features such as platforms, ovens and hearths. Buildings 65 and 56 had a storage

space to the west (any similar room in Building 44 had been truncated by erosion). White plaster was only used for benches, northern and eastern platforms, the walls and within the storage room to the west. A darker grey/brown plaster was used within the rest of the building.

Very specific habituated practices are seen in this sequence of buildings. For example, in Buildings 65 and 44 a whole pot was inserted into the floor near the base of the ladder. This practice has not been found in other buildings at the site and so a very particular memory construction is indicated. Closely connected to the construction phases of all the buildings in the 65-56-44 sequence are burials placed within the south-west area of the structures. In Building 65 there is the burial of neonate twins under the south-west wall and the burial of a child during the construction phase in the south-west platform. In this case it may not be unconnected that the south-west corner of Building 65 lay over a group of baby burials (see above) suggesting there may be more than a spatial connection between the two. In Building 56 two neonate burials were found in close association with the construction of the building, both under the south-west walls. Again in Building 44 there is a neonate buried within the foundation levelling for the south-west platform. This pattern of burials associated with the construction of a building has been identified elsewhere on the site (eg, Building 1) although it is not a common trait.

Disarticulated human remains also appear to have been incorporated within the internal features of some of the buildings, particularly in and around the central east platform. These remains provide an example of specific commemorative practices. In Building 65, a pit was seen cutting the latest plaster surface of the central east platform and it is likely this was to access and retrieve some human remains which were subsequently reinserted into the central east platform in Building 56. Work by Başak Boz has established that the isolated teeth found in the burial platform in Building 56 are those that fit into gaps in the upper and lower jaws of an individual buried in Building 65.

### *The identification of history houses*

Some houses at Çatalhöyük were replaced and rebuilt many times (up to six rebuilds). Others were not. As Düring (2006) had noted, we

have found clear evidence that the longer-lasting houses tend to have more burials beneath the floors (up to 62) and tend to be more elaborate in terms of the numbers of platforms, reliefs, paintings, and benches found within them. Many of the features used to define 'elaboration' are those that are involved in re-use and recirculation. It seems then that some houses were more successful at amassing human remains and animal parts indicative of commemorative memory. We have come to term these houses 'history houses' (Hodder & Pels 2010).

It is possible that these history houses came to provide or control ancestors and rituals for a larger kin or other group or 'house'. What is very clear is that these history houses did not also control production or exchange. We can find no evidence that the people buried in the history houses had better health or were buried with higher status items. We can find no evidence that they had more storage space or more obsidian points or finer pottery or gave larger feasts.

It seems possible that in a relatively egalitarian society certain houses managed through time to amass a 'history'. This may have been maintained over many centuries in that some of the continuous building sequences have distinctive characteristics that are maintained over 4–6 rebuilds – and on average each rebuild has been shown to last around 70–100 years. The 'history' that was accumulated seems to have included human remains. Building 1 had 62 humans buried beneath the platforms, including parts of bodies interred as secondary burials – perhaps initially buried in other or earlier buildings.

As noted above, in a number of instances we have discovered human skulls removed from bodies and inserted at the base of house posts, or placed in burials, or in abandonment deposits. These individual skulls have been found in a number of different types of houses. But the clearest evidence for the bodies from which they have been removed comes from history houses. The sample size is not large. One headless burial occurred in Building 1, two in Building 44, and another in Building 6 in the 'Shrine 10' sequence. Other headless burials have been found in Building 49 which is a very elaborate building with large numbers of plaster layers on the walls and many burials, and in Building 60. All these seem long-lived

elaborate houses, with multiple rebuilds where we can see the evidence. It seems possible, although the small size of the sample needs to be emphasised, that heads (and perhaps other body parts) were removed from individuals in history houses and placed in other houses. In these ways alliances with history houses could be built up through the circulation of the dead.

## **A history town?**

Recently we have started to see that there is continuity through time in the overall arrangement of Çatalhöyük. It has long been known that refuse or midden areas can continue through many levels of occupation. But we now also have evidence that some houses and associated middens are associated with higher densities of deposition (Fig. 18.2) as measured by a spatial autocorrelation measure. It is also clear that these higher density 'hot spots' and lower density 'cold spots' continue through time from level to level.

One of the most exciting results of recent work at the site has been the identification of radial sectors dividing up the lived space of Çatalhöyük. These radial lines have partly been identified in the arrangement of buildings and midden areas in the south-west of the site (Fig. 18.3), and partly by lines that show in Ground Penetrating Radar Surveys in the northern part of the site. Although further work on these radial sectors needs to be carried out in order to discern their date, duration and function, radial sectors can be a logical result of the spread of houses that split off from the early history houses. The spatial arrangement of Çatalhöyük suggests that houses wanted to stay close to other houses (hence the lack of streets). It is possible that houses could trace their ancestry along radial lines to founding houses and the new excavations will attempt to explore this hypothesis.

## **A broader view**

I have argued that some houses at Çatalhöyük had a dominant position in terms of access to ancestors and religious paraphernalia and performance (compare Bar Yosef 1989; Cauvin 1994; Hauptmann 2002; Mithen 2003; Özdoğan & Özdoğan 1998; Schmidt 2001), but they did not convert this predominant

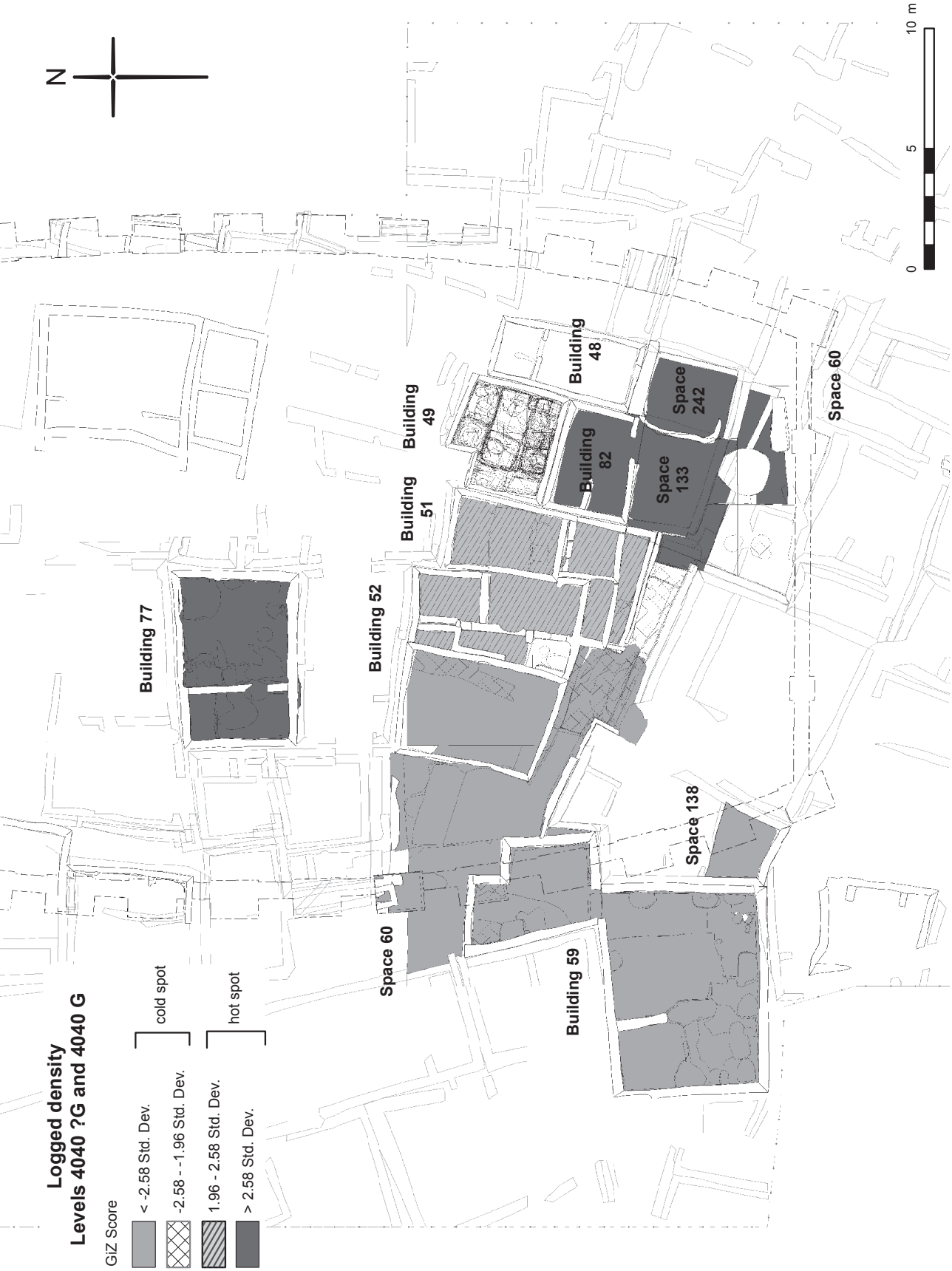


Figure 18.2: High and low density hot-spots in Level ?G and G in the northern 4040 Area at Çatalhöyük. Source: Camilla Mazzucato and the Çatalhöyük Research Project



Figure 18.3: The arrangement of the buildings and midden areas in the south-west part of Çatalhöyük into radial sectors. Source: Çatalhöyük Research Project



position into the control of storage, resources, exchange or production. It is argued that social organisation at the site was based around 'history houses' made up of groups of houses centred on a central house in which the dead were preferentially buried and ritual and symbolic markers were amassed (animal heads, horns, tusks, claws, etc). These houses acted to produce the long-term social relations and structures that are the hallmark of settled agricultural societies. It is also suggested that perhaps the whole town of Çatalhöyük was organised so that historical relations and connections could be charted.

We could argue that the repetition of houses in the same place results from the crowding and permanence of settlements. However, the specific continuities in function and art at Çatalhöyük cannot be explained in this way; neither can the digging down and retrieval of earlier skulls and sculptures. In any case we see that repetition of house sites occurs very early in small, relatively short-term settlements in the Middle East. Certainly, by the time of the PPNA and PPNB the decreased residential mobility and intensity of habitation would have produced greater internal site organisation (Nadel 1998). But even in densely occupied settlements a number of strategies can be taken in locating new houses above, by, or near older houses (Tringham 2000; and see Bradley 1993 for the relationship between old and new houses in the relatively open and dispersed Bandkeramik settlements of Neolithic central Europe). Rather, it seems that the repetition of house rituals and the construction of house-based histories were formative processes that played a part in producing sedentism, long-term duration in one place, and agglomerated settlement.

Of course, repetitive practices took place early in the Palaeolithic. These involved repeated seasonal uses of the landscape in such a way that certain sites that provided shelter, such as cave sites, were returned to over long periods of time. For example, Ksar Akil in Lebanon has 23 m of deposit covering the period from the Middle Palaeolithic through the Upper Palaeolithic to the Kebaran Epi-Palaeolithic (Bergman 1987). Kebara cave also has deposits spanning the Middle Palaeolithic and Natufian periods, or from ~60,000 to 10,000 BC. The Middle Palaeolithic deposits show repeated use of part of the cave for

hearths, while an inner part of the cave was used as a dump area (Goldberg 2001). The hearth area has deep deposits of overlapping hearths, each of which results from several episodes of combustion (Meignen *et al.* 2000, 14). These multiphase hearths indicate long periods of repetitive use in the same depression (*ibid.*, 15), and similar processes are found in other sites in the Middle East. Many fire installations were vertically superimposed (*ibid.*, 16) at Kebara, but the placing of these hearths was not exact. Rather investigators found a zone in the cave where, over a long period of time, people made hearths. Each hearth involved refirings, but the hearths themselves created a vertical palimpsest of overlaps. A part of the cave was generally used for hearths, but investigators did not find specific backward reference.

In the Kebaran at Ohalo II, the largest hut had three successive floors and erect stones as well as a probable stone arrangement under them, and Nadel (2006) suggests a clear focus on continuity of place. Burial beneath floors probably occurred in the Kebaran at Kharaneh IV and Ein Gev (Valla 1991). At Ein Gev 1 in the Jordan Valley in Israel investigators found a 14th millennium BC Kebaran site on the eastern side of the Sea of Galilee (Arensburg & Bar-Yosef 1973). A hut was found dug into the slope of a hill. 'The hut was periodically occupied as indicated by six successive layers which accumulated within it' (*ibid.*, 201). Evidence does not indicate specific repetitions of feature or artefact placements, but this example clearly indicates some specific backward reference in the location of a house structure, even in the absence of permanent occupation.

In the Natufian we see some degree of sedentism. In the short-term sites, there is little evidence of repetitive practices, for example, at Hatula and Beidha (Byrd 1989; Ronen & Lechevallier 1991). Even in substantial Natufian sites we find little evidence of structured repetition. Valla (1991) notes that it is often difficult to follow coherent levels of habitation in Natufian sites, and it is difficult to show the absolute contemporaneity of buildings (see also Kenyon 1981; Moore *et al.* 2000). However, in the early Natufian site of Wadi Hammeh 27 in the central Jordan valley there is 'a continuity in spatial arrangement of constructed features through successive phases' (Edwards 1991, 125). The earliest evidence of Natufian occupation

at Hayonim Cave is Grave XIII 'which was covered by the floor of Locus 3' – that is, by one of the structures with undressed stone walls (Bar-Yosef 1991, 86). At 'Ain Mallaha we definitely find superpositioning of houses. In the 'ancient level' houses, 131, 51, and 62–73 succeeded each other on the same spot (Perrot 1966). According to the reanalysis by Boyd (1995) the 131-51-62-73 sequence of buildings started with 12 skeletons beneath the floor of 131. He draws attention to the continuity of activity in the same place starting with a set of burials. And in the 'recent level' at the site we find another sequence of houses dug into each other (houses 26, 45, and 22). In the Final Natufian at Mallaha, each major building had a succession of floors, one on top of another, with no sterile layers between (i.e. no abandonment fill) (Samuelian *et al.* 2003).

PPNA and related sites were often much more structured than most Natufian sites. Qermez Dere in northern Iraq has good evidence of rebuilding in the same place (Watkins 2004; 2006). In Phase II at Mureybet on the Middle Euphrates investigators found round houses that were superimposed on an Epi-Natufian house xxxvii. '*Trois niveaux d'habitation en maisons rondes se superposent directement à la maison xxxvii de la phase IB. Il s'agit manifestement de la réutilisation du même espace d'habitat en continuité directe avec la période épinaouiennne*' (Cauvin 1979, 26). In part of the site they found five levels of occupation in this phase. At Jericho:

'some of the PPNA houses lasted through several phases, but usually with rebuildings almost from the base of the walls. Associated with most of the phases was usually a long succession of surfaces, particularly in the courtyard areas linking the various buildings' (Kenyon 1981, 269).

At Jerf el Ahmar in northern Syria, in Village 1/east Stordeur found a sunken building with wooden posts to hold up the roof. At the bottom of one of these posts 'two human skulls were found' (Stordeur 2000, 1). These findings begin to suggest the specific use of skulls to build histories in houses, although the use of skulls in this way may have been simply protective or magical. Yet the use suggests that links to the past and past individuals were of increasing salience.

Turning to the PPNB in the Levant, Jericho again has much evidence of repetitive use of buildings and at Beidha, 'the inhabitants were

extremely conservative in their siting of the different elements of the village' (Kirkbride 1966, 14). At Abu Hureyra 2 'each house was usually constructed on the remains of an earlier one, and the form of that building largely determined the plan of its successor' (Moore *et al.* 2000, 262). 'We conclude ... that the builders of a new house often remembered not only the plan but also the internal arrangements of its predecessor, and considered it appropriate to replicate both' (*ibid.*, 265). 'We know, too, that in some instances they themselves were the descendants of the inhabitants of the earlier structures' (*ibid.*, 266) because some distinctive skeletal and dental traits that are probably genetically transmitted were identified in house burials.

Much evidence indicates repetitive practices in houses and history making, often using burial or ritual elements, in the PPNB and related groups in the Middle East and Turkey. Goring-Morris (2000, 119) argues that at Kfar HaHoresh many PPNB burials definitely stratigraphically predated the construction of the overlying architectural features and floors. For example, 'in at least three instances at Kfar HaHoresh burial pits clearly stratigraphically underlie and are sealed by plaster surfaces' (*ibid.*, 119). In some cases we see a time lapse between burial and/or skull removal and the making of the floor. Thus buildings 'remembered' the location of the burials or skulls. There is also PPNB evidence of circulation and handing down of artefacts through time. Practices of stone recirculation and reuse were found at Çayönü. Standing stones up to 2 m high were found in the plaza and in the Skull and Flagstone ceremonial buildings. 'Some of the standing stones were intentionally broken and then buried under the subsequent reflooring of the plaza' (Özdoğan & Özdoğan 1990, 74). At Jericho in the PPNB levels Kenyon found a large bituminous block (Kenyon 1981, 306–7). It had been carefully flaked and was obtained from the Nebi Musa district some 27 km away. Investigators found it in the foundation of wall E223 of phase lxv. But it fits exactly into a niche of the earlier phase lxiv, where it probably stood on a stone set on a pillar of earth on which there were traces of plaster. So this stone had a role in phase lxiv and was then reused in the foundation of lv. In phase lxiii this same room had a distinctive green clay floor, all suggesting

that this part of the building had a special character over three phases.

Overall, then, the pre-Neolithic and Neolithic societies of the Middle East and Turkey were increasingly concerned with temporal depth. Evidence suggests repetitive practices in houses, and sometimes in outside areas (eg, courtyard or midden areas at Jericho), as well as in public spaces such as paved streets. Evidence of specific history making using ritual is also found as houses are built over burials, or skulls and other objects are circulated and passed down through time. The concern with time depth and history reaches its apogee in the PPNB at the same time that domesticated plants appear in quantity, but it starts to emerge at least by Kebaran and Natufian times, even in contexts in which sedentism is limited. It is difficult to explain the focus on temporal depth as the result of living in dense villages. Rather, the emergence of greater temporal depth was a necessary condition for dense settled life, the delayed returns of intensive subsistence systems, and the shift to domesticated plants and animals, as well as for the staging of large-scale feasts, exchanges, and marriages.

## Conclusion

In this paper I have wanted to indicate my debt to Richard for what has turned out to be a very productive idea, that even in prehistory specific historical links were made between past and present. This notion has come to be very central to our work at Çatalhöyük where it has become clear that history houses controlled some aspects of relationships with the past. Much of the supposed 'shrine'-like nature of the buildings and much of the 'art' are actually involved in creating links through time. There seem to have been mythical elements in the Çatalhöyük art. For example, there are paintings of vultures associated with headless human corpses but we have found no evidence on site that headless bodies were left out for vultures. While there was myth at Çatalhöyük, there was also history, by which I mean specific links made between past and present events. These histories were not written, but were inscribed in human and animal skulls and in other objects and body parts.

Perhaps unlike most of the contexts in north and western Europe which have occupied much of Richard's work, history-

making at Çatalhöyük was not associated with dominance in productive and exchange relations. It occurred within a largely egalitarian society and was a mechanism for creating links between houses and for creating the overall organisation of the 'town'.

More generally, the construction of commemorative memory by social groups can be seen to have begun very early in the Middle East, well before fully settled agricultural villages. Indeed it seems likely that history-making was a necessary precondition for the formation of such villages and the long-term, delayed-return economic systems that underpinned them.

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## Being Alive and Being Dead: house and grave in the LBK

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*Among Richard Bradley's many contributions are several on the central European Linearbandkeramik (LBK). In these he has explored the symbolic dimensions of its characteristic longhouses, suggesting that they pointed back to the area of their origins. In the different contexts of Early Neolithic Britain and Ireland he has also explored the varying links between house and grave. There have been few attempts, however, to provide a linkage between house and grave in the LBK. Here the interpretive potential of such linkages is explored, drawing upon the notion of dynamic meshworks. It is argued that house and cemetery grave were often interchangeable images, a reworking of key concepts in the LBK worldview. The grave, or grave and body, were perhaps seen as a house, and conversely, the house may well have been conceptualised as a body. Both house and burial concentrated and distributed identities in the LBK landscape.*

### House and grave

Richard Bradley has been keeping us all on our toes for over four decades. With a constant stream of articles, books, and excavation reports, there are few parts of later prehistory that his active mind has not reached and refreshed. When I first knew him he specialised in the Iron Age and southern England, but his interests soon broadened, and Neolithic studies not only in Britain and Ireland but also in continental Europe have been the better for that. Among his many contributions have been several in the field of the LBK (the Early Neolithic *Linearbandkeramik* culture of central and western Europe, c. 5500–4950 cal BC in

conventional estimations). He has explored symbolic dimensions of the characteristic longhouse (2001), including a special role for its (in western Europe at least) north-west part, a claim since elaborated in detail by Jens Lüning (2009), and suggested that longhouses pointed back to the area of their origins. He has followed the demise of the longhouse into decaying mound in among active settlement space, and has traced some of the possible links between living and dying longhouses, and the appearance of ditched enclosures, with one eye on what was to come later in southern Britain in the 4th millennium cal BC (1996; 1998; 2002). In the different contexts of Britain and Ireland

in the 4th millennium cal BC, separated by the rarity of houses in the former and their relative profusion in the latter, but united by many shared practices of tomb and monument construction, he has also explored the varying links between house and grave, and between treatment of the dead by inhumation (in many parts of Britain) and by cremation (in many contexts in Ireland) (Bradley 2007a; 2007b).

Now the LBK has been researched in some regions of central Europe for well over a century (Čižmář 2008). Probably at least 2000 house plans and at least 3000 burials are known (P. Bickle & D. Hofmann, pers. comm.). Much has been written about both house (among a host of others by Modderman 1970; Coudart 1998; Lüning 2005; Stäuble 2005) and grave (pre-eminently in recent times by van de Velde 1979a; 1997; Jeunesse 1995; 1996; 1997; 2009). Naturally there has been discussion of the relation between longhouse settlements and cemeteries (eg, van de Velde 1997a; Jeunesse 1997; Frirdich 2003; 2005), with opinion undecided whether these burial grounds were open to the whole community or just to particular longhouse clusters, perhaps the oldest and longest-lasting in the neighbourhood, or even to individual, pre-eminent households or lineages within them. There is ongoing research on the decorated pottery found in both settlements and adjacent cemeteries, as at Niedermerz on the Aldenhovener Platte (eg, Hoyer 2010). And, while long held within a strongly culture historical approach, LBK studies in general have become much more open to other kinds of interpretation in recent years (witness the range of papers in, for example, Eckert *et al.* 2003; Lukes & Zvelebil 2004; Lüning *et al.* 2005; Hofmann & Bickle 2009; Zeeb-Lanz 2009; Gronenborn & Petrasch 2010; Classen *et al.* 2010).

In this context, despite the many recent discoveries and the widening of approaches, there has been little further linkage, as far as I am aware, of house and grave in LBK studies (but note a very brief, insightful discussion of the LBK situation by Jones (2007, 103–4) and further reflection on the links between houses and graves in the different context of the Danube Gorges by Borić (2010)). LBK house studies have tended to concentrate, in the first place, on the household, and grave studies on the individual deposition; perhaps

unconsciously reflective of modern, western attitudes to things, life and death have been kept well apart. So in this short contribution, since I have been working recently with many colleagues on a substantial project on the LBK (see acknowledgements; Whittle & Bickle in prep.), I want to develop a suggestion which I made a few years ago (Whittle 2003, 140) about the possible homology of LBK house and grave. In the spirit of Richard Bradley, and in tribute to him, this is in the first place speculative and interpretive.

## The distributed house

The longhouse was the central fact of LBK existence. Longhouse settlements are the principal source of evidence for LBK lifeways. A few camps or task-specific settlements have been suggested, such as Rosenburg in Lower Austria (Lenneis 2009; Lenneis *et al.* 2010), and some upland rock shelters and caves with LBK material have been noted (Lüning 2000; Knipper 2009). Survey, however, including with the help in recent times of sophisticated geophysical prospection, finds more longhouses, rather than traces of other activity in the landscape round about, as would be the case in, say, Britain and Ireland. The gradually increasing number of pollen diagrams serves to reinforce the notion of small areas of cleared ground, and an island-like quality to settlement clusters and groups (eg, Kalis & Meurers-Balke 2003; Kalis *et al.* 2003; Schweizer 2005).

There is, therefore, little surprise that the longhouse has been the focus of so much research. Three claims often made about it are worth noting. Despite the evident variation in size and architectural components (explored in detail since Modderman 1970), many (though not all) LBK researchers see the LBK longhouse as having had a rather restricted number of inhabitants, somewhere between six and ten people on average (Lüning & Stehli 1989; Rück 2009, 181; Strien 2010b; Schiesberg 2010). Very large houses can be assigned a special role, such as cult or meeting houses (eg, Soudský 1969), and other interpretations of the biggest buildings (eg, van de Velde 1979b; Milisauskas 1986) appear to concentrate on relative status rather than number of inhabitants.

The second central claim is of a shorter rather than longer duration for the average LBK longhouse. Developed in the course of

analysis of Aldenhovener Platte settlements, the dominant model has been of a duration of fewer than 30 years. The suggested normal use-life of 25–30 years was reached by estimating the overall span of the LBK occupation there, divided by 16 house generations, arrived at by seriation of decorative motifs on pottery (Stehli 1989; 1994; Lüning & Stehli 1994). That model has been widely influential, for example in analysis of both Bylany and Štúrovo (Pavlů 2000; Pavúk 1994). A variant allows *Grossbauten* to have lasted up to 40 years (Louwe Kooijmans *et al.* 2003).

The third claim is of the spatial and economic autonomy of the household. In the dominant models developed both in Aldenhovener Platte and southern Dutch Graetheide research (Boelicke 1982; Boelicke *et al.* 1988; Lüning 2005; van de Velde 1979b), the individual house stands in its own space (with a radius of some 25 m in the Aldenhovener Platte model, rather less on the Graetheide), forming a homestead or *Hof* in German, and the continuation of this arrangement from generation to generation, with successive rebuildings of the longhouse, forms a ‘yard’ (in Dutch terminology) or *Hofplatz*; groups of yards may constitute bigger wards, as in the two-ward model suggested for Geleen-Janskamperveld (Louwe Kooijmans *et al.* 2003). Such households have often been seen as economically autonomous (eg, Lüning 1982; 2000); a recent variant has groups of households, or clans, within the large settlement of Vaihingen operating as more or less independent economic centres of production, each with varying access to land and soils (Bogaard *et al.* 2011).

All three claims could be, and have been, disputed, though this is not the place to go into detail. All interpretations of numbers of household members are hampered, of course, by the lack of intact house floors. Radical alternatives for house duration have been proposed, of over 70 years and, perhaps, even up to a century (Schmidt *et al.* 2005; Rück 2009), though the 25-year model has also been vigorously defended and restated, along with quite detailed estimates of household composition and the temporality of the life-courses of supposed household members (eg, Strien 2010b). The validity of the *Hofplatz* model has been strongly questioned and the radical alternative of rows of longhouses has

been proposed (Rück 2009). Rather typically here, the aim appears to be to replace one dominant model with another; at first sight, many more easterly settlements, in central Europe, may have rows of houses within them (E. Lenneis & K. Oross, pers. comm.), and whether this applies also further to the west is open to debate. There is also tension in discussions about the possibility that some settlements were some kind of central places, if only for control and management of the supply and distribution of lithics (eg, Zimmermann 1995; Petrasch 2003).

This brief review of some central trends and debates serves to show the centrality of the longhouse but it also illustrates how, in detailed analysis, an overall somewhat static and closed view of LBK existence can often result, even though numerous other studies have suggested a rather different kind of picture. Even within the models briefly sketched above, it has been suggested that male household heirs came into their own at 18, while sisters married out at 15 or 16 (Strien 2010b). If the short household duration model is right, all household members presumably had to shift their allegiance to a particular structure (though not necessarily, in the *Hofplatz* model, their allegiance to a particular place) at least once in their lives, and perhaps twice in the case of longer-lived individuals. Economically autonomous or not, household members could presumably have found themselves in many different kinds of taskscape in the course of routine and non-routine activities, a diversity of activity in field and forest well evoked by Penny Bickle (2009).

This was a connected world, and LBK studies have been good – and could be argued to be getting better – at tracing these shorter- and longer-distance connections through movement of flints, cherts and other lithics (Lech 1990; Zimmermann 1995), amphibolites for stone adzes (Ramminger 2009), *Spondylus* shell from the Aegean or, perhaps more plausibly, the Adriatic (Willms 1985; Müller *et al.* 1996; Zvelebil & Pettitt 2008), and marine shells from the Mediterranean and Atlantic coasts (Jeunesse 2002). A range of things came into the LBK orbit from the Mesolithic north (Gronenborn 2010); and there were also specific decorative motifs on pottery shared over not only shorter but much long distances (Krahn 2003; Krahn-Schiol 2005;

Strien 2003; 2010a). Isotopic studies have opened up comparable insights at the level of individuals and communities (Price *et al.* 2001; 2003; Bentley 2007; Bentley *et al.* 2002; Zvelebil & Pettitt 2008; Knipper 2009), and our Lifeways project will contribute further to such investigations (Bickle *et al.* 2011; Whittle & Bickle in prep.).

So what was the quality of being alive in the LBK? It seems to me that we need a more layered view of LBK existence, in the terms of Tim Ingold (2011) a dynamic meshwork, characterised by movement and interaction rather than only by fixed points. Something of what I have in mind has, in fact, already been sketched by Peter Bogucki (1988, 117–28). He followed Lüning (1982) in seeing the household as an autonomous, discrete economic unit, constrained little by availability of land but much by potential scarcity of labour; household production likewise constrained the size of herds. The risks of failure in what Bogucki saw as an uncertain environment necessitated a ‘support network’ or non-hierarchical social web beyond immediate micro-regions or settlement clusters, thus linking neighbourhood communities by exogamy and kinship bonds to much further afield; the house is seen as a ‘node in an interlocking network of kinship and social ties both within the microregion and beyond’ (Bogucki 1988, 121). Envisaging the widest possible definition of kin, bilateral kinship relations radiating out from each household are proposed, rather than any rigidly defined unilineal descent system; I will come back to that issue briefly below. While the possibility of some difference at community level is left open, the necessity for reciprocity was seen as likely to dampen any such divergence; items such as *Spondylus* circulated as ‘scarce necessities’ (Bogucki 1988, 126) or perhaps bridewealth rather than as prestige items.

Now take out the assumptions to do with risk and uncertainty, because we can question whether the Neolithic lifestyle would have been so widely and rapidly adopted if these had been as extreme as Bogucki argued, and substitute a sense of Ingoldian meshwork for static network, and the emphasis can be on a kaleidoscope of social interaction, movement, and connection, diversely motivated. People and their structures carried a history with them (Bradley 1996; 2001). People were out

and about in their taskscape, near and far (Bickle 2009). Some people may have gone long distances to procure raw materials, not all of which necessarily went simply hand-to-hand (Gronenborn 2010), and others may have ranged extensively with herds of cattle. Particular households, lineages, or communities may have been connected with kin or allies far away (Strien 2003; 2010a), perhaps initially through the contingencies of the circumstances in which Neolithic things and practices spread across central and western Europe.

This fluid side of existence might, perhaps, have been important in recruiting indigenous people to a Neolithic lifestyle in the first place. But this is only part of the spectrum, and other aspects are firmly rooted and local. In the analysis of Vedrovice, in Moravia, isotopic analysis has been taken to show the presence of locals, ‘born-aways’ and people born locally, who moved away but returned in later life to the area of their birth (Zvelebil & Pettitt 2008; Zvelebil *et al.* 2010). The sample is relatively small, and further, wider studies (eg, Bickle *et al.* 2011; Whittle & Bickle in prep.) may suggest that the majority of people lived the bulk of their lives within a local orbit; there is already some suggestion that individual mobility may have reduced through time (Knipper & Price 2010). And that seems to bring us back to the house. Whether or not it was relatively empty, since six people in a 25–30 m long structure full of posts, and presumably screens, are not exactly a crowd; whether or not the longhouse always stood on its own, its *Hofplatz* space symbolising and actively signalling household independence; whether or not each and every longhouse cluster or ribbon was of equal social standing; whether or not all longhouses were kept in active use for the same length of time, since we can envisage, within overall regional chronologies, varying and overlapping durations – the longhouse was the point around which the kaleidoscope shifted. It could also be seen as a shifting assemblage of people, things, and even places. It brought together people who were constituted by relations across a wide social landscape, and many more people than the numbers noted above were presumably necessary for construction in the first place, the collective effort clearly implied serving to spread the house beyond its mere location.<sup>1</sup> The house both concentrated and distributed identities in the LBK landscape.



## The collected grave

The individual grave was another central social fact of the LBK way of doing things. That way of putting it is not intended to imply uniform mortuary practices, and research in the last 15 years or so has emphasised diversity more and more (eg, Jeunesse 1995; 1996; 1997; van de Velde 1997). In this brief paper I am going to concentrate on individual inhumation graves in cemeteries, close to settlements where local settlements have been investigated, but the range is of course much wider. We know of varied burials and depositions in settlements (Orschiedt 1998; Veit 1996), depositions including skull nests in caves, the massacre pit at Talheim (Wahl and König 1987) and the astonishing assemblages of fragmented remains in the pit-defined circuits of the Herxheim enclosure (Zeeb-Lanz 2009; Boulestin *et al.* 2009), as well as plenty of cremations alongside inhumations in cemeteries. Pieter van de Velde, among others, has noted (1997, 86) the obvious fragility of cremation deposits in what were in specific instances such as Elsloo significantly shallower pits than used for inhumation graves, so that it is clear that cremations must be under-represented in the LBK mortuary record.

Leaving other kinds of deposits aside here, just settlement burials and cremations on their own indicate the considerable variety of mortuary practice. Settlement burials have often been seen as odd (*Sonderbestattungen* in German), because they do not fit, or at least only partially overlap with, the perceived norm of a single inhumation rite in cemeteries (Hofmann 2009), and as potentially of lower status. Both Hermann Behrens (1973, 242) and, more recently, Daniela Hofmann (2009, 231) have argued for a different kind of connection between living and dead: a desire to keep active memory of the dead among the living, at least for a finite period of time. That could link back to the temporality of houses and households. A different kind of treatment is implied by cremations, through which dissolution of the person and perhaps the release of their spirit were achieved (though there is obviously a danger here of applying universal explanations of cremation practice). Possibly only a relatively small percentage of LBK houses ended by being burnt (though it is hard to quantify this: D. Hofmann,

pers. comm.), but whether we could simply equate the number of cremation deposits in given cemeteries with the burnings of structures of particular households in adjacent or contributory settlements is very hard to say. Human remains in settlement burials are often (though far from always so) incomplete, so that there is at least here another element of decay or dis-assembly, which could perhaps be related to the decay of houses (and see Hofmann in prep.).

Pieter van de Velde has also made the simple but important point (1997, 87) that, even on the most conservative estimates of population densities in the LBK (and see Zimmermann *et al.* 2009, for more radical possibilities), all these archaeologically visible means of treating the dead must under-represent the original living population. His proposal is that the normal means of disposal must therefore have been by exposure out in the landscape. This is obviously hard to evaluate and quantify, and a counter-suggestion might be that cremation was much more widely practised, but importantly for the argument here his claim again serves to distribute people into the landscape in death, in a manner that might have mimicked or symbolised their activities while alive.

Contrast, then, all the above with the collected and selected graves in cemeteries. These burial grounds are found widely across the LBK distribution of central and western Europe, though there are some gaps to date, in the Paris basin, Hungary, Poland, and parts of central Germany (Jeunesse 2009, fig. 12). It is never easy to see how settlements and burial grounds relate to one another. At least two of the largest known LBK cemeteries, Wandersleben and Aiterhofen in central and southern Germany respectively, do not have extensively investigated settlements close to them.<sup>2</sup> In some other cases, cemeteries appear to lie close to large and long-lived settlements; Elsloo is an obvious example (Modderman 1970). That might also apply to Niedermerz on the Aldenhovener Platte, across the Merzbach from the large and long-lived settlement of Langweiler 8 (Dohrn-Ihmig 1983), but detailed analysis of decorative motifs on pottery suggests that a couple of other local settlements may be implicated as well (Hoyer 2010).

LBK cemeteries varied in size, and very varied conditions of excavation have also to be taken

into account. Numbers of graves probably range from tens to hundreds. Wandersleben and Aiterhofen already cited had respectively 311 graves (of which 132 were for cremations) and over 160 graves (with a further 65 cremations) (Hoffmann 1989; Nieszery 1995; Jeunesse 1997). Schwetzingen in the Rhineland had 203 graves (some of them for cremations) (Gerling 2009). Quite a few of the others appear to fall around the hundred mark. It is difficult to establish the smallest cemetery, as several with low numbers result from older and probably incomplete investigations in less than ideal circumstances, such as Quatzenheim in Alsace, now with 17 graves known (Jeunesse 2005). Simply judging from overall numbers, not all burial grounds may be the same, but many if not all probably reflect a process of selection, set against the other mortuary practices and likely total populations discussed above. This has, however, been challenged. Pieter van de Velde argues (1997, 86) that the cemetery at Elsloo is placed on the far side of the settlement, away from other local sites, and therefore belongs only to it. He estimated a settlement size of 8–11 houses, with five or six occupants each, ‘together some 40 to 60 people’ at any one time, and given the further estimate that the cemetery was in use for only three generations, over that span the village would have seen 120–80 deaths: compared with the 113 burials in the cemetery. Even so, there seems to me to be selection here, and the estimates would look different with different assumptions about numbers of inhabitants, the duration of houses, the duration of the cemetery, and its exclusivity.

The overall layout of LBK burial grounds is quite varied, some being more linear and others more roughly circular. Individual graves are normally at a short distance from each other, and must presumably have been marked (of which more below), since relatively few intercut. The dominant orientation is broadly east–west, with quite a lot of variation around that. Graves often appear to form clusters or groups within these burial grounds, as at Vedrovice (Podborský 2002, Abb. 2; Zvelebil and Pettitt 2008, fig. 2). Several groups are apparent within Aiterhofen, and were suggested by the excavator to represent different settlements (Nieszery 1995, 55–6), though differentiation may appear to be more on the basis of age and sex (Hoffmann 2006; Bickle *et al.* 2011). More

analysis of these clusters would be fruitful. Rows or lines of graves are also apparent, for example at Nitra (Pavúk 1972, plan 1). The eastern part of that cemetery, however, is much more irregular, and it is possible to see lines as well as clusters within Vedrovice. Nearly all analysis takes the whole plan as its single scale, and there has been far less attention to the process of accumulation and growth (in contrast, see Chapman 2000). Was this cluster by cluster, row by row, gradual, or in spurts? The estimates given by van de Velde for Elsloo (1997, 86) suggest, at face value and assuming steady mortality, a deposition rate of more than one grave every year. There is likely to have been much variation, but minimally we could suggest that cemeteries were likely to have been in regular if not constant use. Further chronological studies seem highly desirable.

Within the grave, and normally at considerable depth below the surface and on the base of the grave (there are some variants in undercut side niches), intact bodies were carefully deposited. The recurrent position of the body was on the left side, more or less crouched, with head to the east and facing south (again with variation around that). Regularly, however, there are graves within the same cemetery either with the body in an opposed position or with a transverse orientation. These do not normally appear to be grouped into particular or confined parts of a given burial ground, though there may be some exceptions to my claim of intermingling (eg, Jeunesse 1996, figs 7–9) and thus of acceptance of such variation. Although much ink has been used to analyse the provision of grave goods in a search for relative social position, it is worth stressing how many such LBK graves were not provided with things at all. The figures vary from region to region and within regions (Jeunesse 1996; 1997). At Schwetzingen, some 52% of the graves had nothing now visible with them, and the numbers of adzes and *Spondylus* in the others were very restrained compared with elsewhere (Gerling 2009). Virtually all the things that turn up in other LBK contexts can be found in graves, but usually in restrained though uneven quantities.

Many important analyses have identified patterns of association and abundance according to age, sex, and region (from a much longer list, see Jeunesse 1997; van de Velde 1979a; 1997). Further correlations have been

sought with life histories as revealed by isotope analysis (eg, from a now longer list, Price *et al.* 2001; 2003; Zvelebil & Pettitt 2008; Zvelebil *et al.* 2010), and our own Lifeways project will add others (Whittle & Bickle in prep.). Such patterns are not my first concern here. I want to ask in general terms, as of living people in their house-centred though not house-bound world, what the quality of being dead was. What, beyond the detail of who was given what, was being projected in and through the cemetery?

It is perhaps easy to overlook or take for granted the normal completeness of these inhumations, probably of clothed bodies, given the ornaments found on heads, arms, and waists. The dead are more often than not crouched. Might this evoke the foetal position, or resemble people sleeping? In either case, though again it is all too easy to resort to universals here, there was perhaps a sense of getting ready for renewed activity. There appears to be a broad contrast between extended and supine inhumations in many Mesolithic contexts and the normally crouched, sided burials of the LBK (and indeed other Early Neolithic contexts elsewhere).<sup>3</sup> The small cemetery at Quatzenheim in Alsace (Jeunesse 2005) stands out for the number of extended supine burials, though these are not unprecedented elsewhere in LBK contexts. Some thought has been given to the possibility that these positions reflect well defined and separate Mesolithic and Neolithic traditions (eg, Jeunesse 2005; 2009), though there is a danger here of seeking essentialised identities. Again in the spirit of Tim Ingold (2011), I am interested in what these positions might have been used to perform or project. Supine burials look up to the sky, perhaps (if this is not completely fanciful) to an existence beyond the earth, whereas the crouched, clothed body of the recurrent LBK grave could be seen as more engaged, or ready to be engaged, with ongoing activity in the world.<sup>4</sup> Those that do have grave goods with them are accompanied by the things of everyday existence, from pots to tools to ornaments, distributed around (when not literally on) their bodies, ready to hand. There is scope here for further detailed study (and I make no claim to exhaustive analysis), and there may be mundane considerations of what could be fitted where in the confined space of the base of quite deep graves. To

take Aiterhofen as just one example (Nieszery 1995), most things are placed either in front of the body, in the region of the arms and hands, or around or just behind the head (to which we will return below). A few things are placed in front of or just behind the feet, predominantly pottery (eg, graves 66, 106).

This is not a plea to set aside the detailed analysis of mortuary data, but to integrate with that a contextualised view of treatment of the LBK dead. The burials found in cemeteries are, in my view, probably a selection, on criteria to be discussed below, and they normally seem to present to survivors and mourners a last image of individual, intact, complete, clothed, sleeping or resting bodies, looking, perhaps expectantly, in particular, shared directions, and ready for continued action in the world. Since these characteristics apply, with variations of course, to all the dead inhumed in LBK cemeteries, whereas only a varying proportion were provided with things, they could be seen as *the* most important facet of this mortuary rite. Things further enhance this projection, but they do not create it on their own.

## House and grave

I want now to bring reflections on house and grave, on being alive and being dead, together. Daniela Hofmann has usefully underlined the difficulties which we can create for ourselves by seeing formal cemetery burial as the default or normative LBK mortuary rite (2009; in prep.). Not least, there is a considerable danger of downplaying settlement burials and relegating them to some kind of unusual category or inferior status, and thereby of missing a spectrum of kinds of memory. It is also legitimate to blur, to some extent, the differences between 'formal' cemetery burial and settlement burial (Hofmann 2009). These points are well made. But that still leaves the task of explaining why separate burial grounds existed so widely in the LBK (if not much in its earliest phase), with all their characteristics noted briefly above. My first proposition, elaborating the view of Andrew Jones (2007, 103–4),<sup>5</sup> is that house and cemetery grave were often interchangeable images, a reworking of key concepts in the LBK worldview. I do not insist on a single worldview (not least because worldviews have not been systematically thought about in recent LBK studies, and

because there is usually ‘diversity within uniformity’ within the LBK world: Whittle 2009; Modderman 1988), and I make no claim that this idea exhausts the rich possibilities of both house and grave. But I find several interesting points of intersection.

In the *Hoffplatz* model, houses stood in their own space; graves regularly have space around them. Houses also form either yards, wards, or rows, and sometimes perhaps all such elements in a single settlement; graves can be laid out in a general scatter, but also in tighter or more easily identifiable clusters, and sometimes also rows. In the *Hoffplatz* model, there is continuity of building in a more or less tightly defined place, and successive buildings are repetitions; supporters of the row model have not yet explored site chronologies in the same detail. In many cemeteries, graves may have been added one by one, gradually (or at any rate over time) creating the total space of the burial ground, though clusters could be seen, especially in a case like Nitra with its intersecting graves within tight groups (Pavúk 1972, plan 1), to echo *Hoffplätze*, and the same could be argued of rows of graves in comparison to rows of houses. Houses normally share a common orientation within individual settlements and regions; graves too share orientations, though as noted above there is considerably more variation in this feature of them than is the case for houses. The overall north–south orientation of houses (trending to north–west–south–east as one moves north–west in the LBK distribution: Coudart 1998; Bradley 2001) is different to that of the overall west–east orientation of graves, though bodies recurrently face southwards like one end of the longhouse.<sup>6</sup> Could there be both difference and linkage here, rather as Edmund Leach (1976) noted the complementary qualities of white at weddings and black at funerals? Houses, whether in *Hoffplätze* or rows, represented a succession of buildings, many perhaps abandoned (depending on one’s view of durations) before they had to be, and left to decay into mounds, with protruding posts, in amongst and close to the fresh buildings occupied by former or new inhabitants (Bradley 1996); it is not normally possible to backfill a dug feature like a deep grave so that the original surface is left level, and an LBK cemetery could have consisted of a series of small rectangular mounds with protruding

markers, mimicking the look of one aspect of the continuing settlement.<sup>7</sup>

Could, therefore, at least in part, the grave, or grave and body, have been seen as a house, and conversely, could the house have been conceptualised as a body? There are sufficient ethnographic analogies to allow the latter proposition (eg. S. Hugh-Jones 1995; C. Hugh-Jones 1996; cf. Tilley 1999; Borić & Robb 2008; Borić 2010), though the rich symbolisms of the house need not be confined to the metaphor of the body alone. The proposition by Lévi-Strauss of *sociétés à maison* or house societies included the definition of the house as in part ‘a moral person’ in its own right, involved in descent and the transmission of property (Lévi-Strauss 1979). In my view this model, though attractive because it focuses on house succession which we can also track archaeologically, is in many ways problematic, since it seems to float well above the detail of supporting ethnographies. It has nonetheless been enthusiastically adopted by many researchers (eg. Joyce & Gillespie 2000; Beck 2007; Gillespie 2007; Joyce 2007; Helms 2007), including for the Neolithic of both south-east Europe and the LBK (Borić 2008). Whatever the general merits of the house society model, the converse proposition of LBK grave as house can also be argued. There are the specific points of comparison noted above. Could Modderman’s analysis of house parts also be recruited to the argument here? Could the modular nature of the house, in Modderman’s view, be mapped on to the body? To the arguments that the north-west part of the house was special (Bradley 2001; Lüning 2009), we could add the proposition that it and the head of the body were in some ways equivalent, and the arms and hands in some ways equivalent to the middle of the house. This view would have the north-west part of the house as the head or spirit, and conversely the head region of the body, often in LBK graves with a sprinkling of red ochre, as encapsulating the inner sanctum of the house. The lived-in middle part of the house, in Modderman’s view, could be sought in the middle part of the body, where hands and arms have things ready to hand. This in turn could generate a novel interpretation of the central Y- and J- post settings of earlier LBK longhouses, at least in buildings more to the north-west of the LBK distribution.

At this point, it might be prudent to end.



This kind of view might work best for tripartite houses, or perhaps bipartite houses, as it says little about the feet of the body and the southern/south-east parts of the house, often taken as one of the principal entrances. It probably also tramples over a lot of detail for the use of different parts of the house and the zones immediately outside it, gleaned from close study of artefacts (e.g. Hofmann 2010, Abb. 2). But it opens up fresh possibilities for thinking about house and grave together, and it would provide one way of thinking about the selection which I have claimed in the general character of LBK formal burial grounds. Where did all the other people go, and who are the people chosen to be placed in the cemeteries? In his close modelling of household members, Hans-Christoph Strien (2010b) has specified among others resident male heirs, their wives (in a polygamous system) and their brothers, with outmarrying sisters. Could this be the range of people seen in particular clusters such as at Vedrovice or, even more strikingly, in the tight clusters in parts of Nitra? The LBK literature has so far concentrated on establishing general rules of residence, with patrilocality as the current favourite as noted above, with patrilineal descent as the likely accompaniment (see, for example, Eisenhauer 2003; Lüning 2005; Bentley 2007; note the divergent view of van de Velde 1979a; 1979b). There is much more to find out, and both detailed chronological modelling and extensive aDNA research will be needed in the future. But in the speculative spirit of this piece, my further proposition is that cemetery graves could stand for the preeminent households of the settlement or settlements from which they were selected.<sup>8</sup> Differential land access suggested in the analysis of house clusters at Vaihingen (Bogaard *et al.* 2011) may have been mirrored elsewhere by differential mortuary rites.<sup>9</sup> Such putatively pre-eminent households may or may not have been resident in the larger or largest houses, bipartite or tripartite, since past attempts to correlate house size with the abundance of things found in and around them have been at best problematic (van de Velde 1979b; 1990; Milisauskas 1986), and they need not all have been the same. But it is certainly tempting to think of the households in big houses, perhaps quite simply with more people in them, providing more

labour, more connections and more allies. It is doubtful whether my view of house-grave homologies yet clinches the case, but my vision is of a mythical settlement, not re-created much later and in a different geographical context (Bradley 2001; 2002, 32–3), but alongside the continuing place of the living. Perhaps particular households (or other social groupings) took the lead in creating, maintaining, and controlling this particular kind of social memory, in the conditions following the expansion of settlement from the Flomborn phase onwards (normally reckoned as starting *c.* 5300 cal BC). As in many other kinds of memory work, a wide range of citations were made (Jones 2007, 103–4), and grave as well as house both collected and distributed, and perhaps invented, identities. Cemetery grave and house were reworkings of each other, but need not have been seen as identical.<sup>10</sup> In their graves, the cemetery dead lived on, but they lived in or under graves which at ground level recreated, in miniature, the look of decaying longhouses. The grave became another moment on the line of existence, or another point around which a differently configured kaleidoscope turned.

Two brief afterwords are in order. First, we do not need to force all cemeteries into this one model, and that may be another fruitful axis of difference to explore. Secondly, it is imperative for us all now, at this stage, to think much further about the line of descent and transmission. The house itself may have been involved in this, but perhaps more through the metaphor of the body of particular household members rather than in the Lévi-Straussian conception of house society. It is clear that formal cemetery burials are not just those of males, and Christian Jeunesse in particular has stressed regional variations and changes through the LBK sequence. In allowing space for brothers, uncles, wives, mothers, aunts, sisters, and others, we can also at this stage remember the suggestion of bilateral descent, reaching far out into the LBK social landscape, distributing connections, but bifurcating and eventually dissipating through time.

### Notes

- 1 I owe much here to discussion with Oliver Harris and John Robb.
- 2 At Aiterhofen, there is clear evidence for settlement, perhaps extensive, to the immediate south of the cemetery, though it has not been extensively investigated: D. Hofmann, pers. comm..

- 3 A point I owe to both Dušan Borić and the late Marek Zvelebil.
- 4 We could bear in mind *vastu*, the ancient Hindu system of architecture and design, 'based on the story of the demi-god Vastu Parusha, whose followers believe he exists in every plot of land, with his head resting on the north-east side and his legs folded in the south-west. Each of the elements is assigned a direction – the earth to the south-east, water the north-east, air the north-west, and space in the centre' (Lucy Warwick-Ching, *Financial Times*, Saturday 10 September, 2011). For further detail, see, for example, Klostermaier (1994, 317–8) on *vastupurua*.
- 5 'The burial of people in cemeteries indexes an idealised notion of the settlement' (Jones 2007, 104).
- 6 There is a lot of variation by region, which there is not space to explore here.
- 7 In a few cases in Alsace, such as Mulhouse Est/Rixheim, there are post settings within the grave cut (Schweitzer & Schweitzer 1977; Jeunesse 1997, 60).
- 8 A view which has considerable implications for the wider social representativeness of cemetery samples used in our own and other isotopic analyses.
- 9 And at Vaihingen itself, graves appear to belong principally to the area of one of the proposed clans (Strien 2005; Bogaard *et al.* 2011).
- 10 We could perhaps think of a *Friedhofplatz* model to set alongside the *Hofplatz* model.

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## Ash and Antiquity: archaeology and cremation in contemporary Sweden

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*Exploring the memorialisation of the dead in contemporary Sweden, this paper draws attention to the overt and implicit allusions to the prehistoric and historic past in the material culture and landscapes of memory and ash groves (minneslund and askgravlund). It is shown how memory groves create a sense of nostalgia and primordial antiquity through their geological, botanic and archaeological designs and their integration into pre-existing churchyards and cemeteries. Ashes are used to create different bonds between the living and the dead through their disposal and association with contrasting material cultures, monumentalities and landscapes. It is stressed that exploring the importance and potential of studying the material cultures and landscapes of the contemporary cremated dead may provide new insights and perspectives upon death in the human past.*

Over the last half-century, landscape designs and material cultures have been deployed to recreate and re-enchant contemporary mortuary commemoration in Western secular societies. Until very recently, archaeologists have seemed largely oblivious to these rapid and varied changes in the commemorative material culture and landscapes of human ash within the societies in which they live and work. This is now quite surprising given the well-established tradition of archaeologists exploring the recent and contemporary past (Harrison & Schofield 2010) and the crucial in-roads mortuary archaeologists have made in studying 18th, 19th and early 20th century burials and memorials (eg, Mytum 2004; Welinder 1991). Yet most commentators have been content to

regard modern cremation as the antithesis of open-air cremation in the past, this author included (Williams 2004). In archaeological debates, contemporary cremation is seen as a list of austere clichés selected from sociological commentaries on the body and society in Western modernity, useful only as an interpretative and rhetorical straw-man for the activities of past people. This caricature of contemporary cremation in archaeological discourse is as problematic as regarding past cremation as exotic and esoteric alien deathways inexplicable to the Western mind without recourse to non-Western ethnographic and literary analogies. Some archaeologists might even be accused of wallowing in the otherness of past cremation with a frenzy that is

reminiscent of the romanticised and ultimately derogatory orientalism of Victorian colonial accounts of cremation in India, South-east Asia and Australia. Rather than removing modernity from the past, instead this only enforces the stereotyping of cremation in both past and present. To do this, modern cremation must be seen as industrial, secular and without meaning or ritualisation.

The first step to overcome this interpretative dilemma and bipolar perception of cremation is to recognise that, when studying cremation in the past and the present, both involve dealing with the otherness of using fire to transform the human cadaver. For the past, cremation was certainly a challenge to archaeological interpretation, a varied, complex, and multi-staged mortuary process often leaving scant material traces that was utilised in many different cultural contexts and involved incredibly different material cultures, architectures, and landscape contexts. Yet this also applies to Western modernity since here cremation is equally alien and difficult to comprehend for other reasons despite being widely-utilised in Western societies. This is because most people, including archaeologists, only encounter crematoria, cremation memorials, and the scattering of ashes on an intermittent basis and rarer still are we participants in public rituals involving cremation. When we are, the cremation event is itself behind closed doors and the ceremonies tend to be private and family-orientated rather than embedded in discursive and public ritual performances. This reflects modernity's widely-observed trend towards individual and personal mourning practices (eg, Hockey *et al.* 2007) as well as the secularisation of death. In other words, despite all the contrasts in technology and trace between ancient and modern cremation, neither are 'familiar' and each requires archaeological scrutiny.

The second step is for archaeologists to recognise that their vision of death in modern society as 'taboo', medicalised and screened from public experience is hopelessly out-of-date, stereotyped, and misleading. We need to re-evaluate this approach to take into account recent sociological and anthropological studies of death in Western late modernity. In particular, archaeologists need to perceive the various ways in which death is present and materialised in contemporary society in both

private and public contexts, and contexts that can be both private and public simultaneously (Sayer 2010; eg, Hockey *et al.* 2007). Furthermore, the study of cremation practices in both the past and present each requires the archaeological exploration of the material traces of people's actions and rituals that seek to transform and manage the corpse and negotiate the powerful affective and mnemonic agency of ash. Moreover, cremation past and present can be understood by considering the tensions and interactions between absence and presence, monumentality and ephemeral, spaces, place and landscape that make fiery funerals an effective and affective commemorative media (see Williams 2004; 2008).

Once these two points are borne in mind, it then becomes possible to engage archaeological perspectives and methods to cremation past and present. Two good examples that promote this approach are worthy of explicit citation. Ing-Marie Back Danielsson has recently explored cremation in contemporary Sweden, showing how its material culture finds parallels with the study of cremation in the more distant past but also how archaeological themes have inspired and pervaded Swedish commemorative culture over the *longue durée* (Back Danielsson 2009; 2011). More specifically still, Tim Flohr Sørensen (2009) has investigated the changing architectures, movements, and emotions associated with the rise of cremation and the adoption of lawn cemetery areas within rural Danish churchyards, providing both a contrast and parallel for the Swedish discussion presented here.

Inspired by this work to explore an archaeology of contemporary cremation, this short paper looks at cremation in one of the world's most affluent, liberal, secular, and cremating countries: Sweden. Death is organised differently in Sweden from the UK: the Church of Sweden controls and manages bodies and funerals, and in most cases oversees the disposal of ashes (Walter 2005). Hence, ashes are relatively rarely scattered in the Swedish landscape but often reside at crematoria, their grounds, or in traditional spaces of burial and commemoration. I contend that while modern cremation is only partially relevant and appropriate to provide analogies for studying past cremation practices (see Parker Pearson 1982; Back Danielsson 2009; see also Downes 1999), archaeologists can draw on approaches

to past cremation to study cremation today. In particular, mortuary archaeologists focusing on the material traces of death, disposal, and commemoration can investigate the mnemonic and affective agency of ashes, as well as the material cultures and landscapes associated with cremation and ash-disposal. This may allow us to perceive the materiality of modern cremation in sustaining emotive bonds with the deceased and stage their selective remembrance (see Sørensen 2009; Williams & Williams 2007; Williams 2004; 2008; 2011a, 2011b).

### Sweden's memory and ash groves

Sweden's gardens of remembrance are exclusively used to receive human ashes (these are subsequently called 'memory groves', the direct translation of the Swedish *minneslund*). These are commemorative environments with textual anonymity; places where ashes are buried under a lawn without memorials. Ash groves (*askgravlund*) are more recent developments of memory groves; they are less textually-austere commemorative environments. While they share many similarities with memory groves, the burial locations of ashes can be marked by a stone and/or plaque bearing the name of the deceased and the dates of their birth and death.

I first encountered Swedish memory groves in cemeteries and churchyards during fieldwork in the late 1990s. Yet from 2005, during fieldwork at a Viking boat-grave cemetery in Sweden, I realised that a study of this form of commemoration was required for a number of reasons, namely because:

- Swedish colleagues could not point me to any archaeological discussions of this practice and therefore this appeared new territory for archaeological investigation.
- It seemed clear that I was witnessing a previously undocumented (by archaeologists) and ongoing commemorative tradition. This was certainly true of rural Sweden. For while urban cemeteries have had memory groves since the late 1950s, in rural churchyards I encountered memory and ash groves under construction and some with recent foundation dates inscribed upon them. Also, I encountered new groves where none had been on visits to the same churchyard a few years earlier.

- I felt that the contemporary data lent itself to similar approaches developed for the interpretation of early Anglo-Saxon cremation concerning the agency of ashes and the mnemonic roles of ephemeral practices, spolia and the historic landscape in commemorating the cremated dead (Williams 2004; 2008).
- My archaeological background and training helped me to recognise both overt and implicit allusions to the prehistoric and historic past in the material culture and landscapes of memory and ash groves. Some of these material references to the prehistoric and historic periods were evidently by design while others may simply be involuntarily. Either way, it appears that memory groves reveal a renaissance in nostalgia and invented traditions accompanying their establishment (see also Burström 1996; Holtorf 1996; 2005; Holtorf & Williams 2006), reflecting long-term interaction between mortuary practice and archaeology in recent Swedish culture (including landscape designers and popular culture), drawing on romantic conceptions of landscape and antiquity (see Back Danielsson 2009; Holtorf 2003).

It is the fourth and final point that is the focus of this chapter. Between 2005 and 2009, I visited around 158 Swedish churches and churchyards in the historic Swedish districts of Blekinge, Gotland, Öland, Östergötland, Scania, Småland, Södermanland, Uppland, and Västmanland. Each site is referred to in relation to its historic region, a system somewhat anachronistic but familiar to archaeologists and commensurate with emphasising the historical background to each site: Blekinge (Bl), Gotland (Go), Scania (Sk), Småland (Sm), Södermanland (Sö), Uppland (Up), Västmanland (Vs), Öland (Öl), and Östergötland (Ög). I recorded each grove with a digital camera, noting its design and deployment of prehistoric and antique designs and architectonic features, as well as their spatial association with pre-existing structures within the mortuary landscape. By any archaeological standards, I suggest that this is a viable sample from which to discern trends in the contemporary commemoration of Sweden's cremated dead, particularly in rural areas where most of my visits took place.

Each memory grove I visited was unique in its location and design, adapting to cemetery





Figure 20.1: Pseudo-runic inscription at the memory grove within the woodland section of Mjölby cemetery (Ög). Photograph: Howard Williams 2009



Figure 20.2: The boat-shaped ash grove at Motala cemetery (Ög), designed to evoke a form of monument associated with cremation in prehistory. Photograph: Howard Williams 2009

and churchyard space and employing variations on an evolving set of themes. While no two memory or ash groves are alike, they often comprise of paths leading to a collection of repeated material attributes. These include benches, lanterns for votive candles, and flower-holders for floral offerings. These features usually face memorial rocks framed by pairs of evergreen and deciduous trees and/or a monumental stone or wooden cross. Water features (fountains, pools, and streams) may also be present and there is usually an open lawn space where ashes are interred without a marker. All these features tend to be enclosed by trees and borders planted with flowers, heather, bracken, or shrubs. Some involve careful landscaping to afford a distinctive presence and a degree of seclusion from the adjacent burial plots, although frequently the edges of groves are permeable and ambiguous. Paths, often lit with lanterns, direct the visitor to the groves.

### *Replicating the past*

The idea of the grove is essentially steeped in the romantic nationalist nostalgia that previously inspired the popular dissemination of ‘woodland cemeteries’ throughout 20th century cemeteries and churchyards in Sweden (for further discussion, see Williams 2011a). Specifically, the use of natural boulders, fountains, running water, and pools together with trees (both deciduous and evergreen), hedges, flower beds, and grass create ‘natural’ and primordial tombs situated within an idealised and nostalgic Nordic landscape. With facilities for lighting candles and placing flowers, this is created as a space designed for repeated visits to mourn the dead.

Geology is a cultural phenomenon and affords this sense of antiquity to memory groves. In memory groves, ‘ruined stones’ (Bradley 1998) provide a focus for mourning. For instance, at Västra Husby (Ög) and Tillinge (Up) the focal stones are moss-covered – evidently long exposed in the natural landscape. They bring the surrounding Swedish landscape into a recently-created monument and afford it with a ready-made geologic gravitas.

Other memory groves seem to recreate prehistoric monumental forms. For example, at Vikingstad (Ög), a large stone with *minneslund* inscribed upon it is set in bank of smaller stones giving the appearance of a dilapidated burial cairn. Similarly, at Östra Tollstad (Ög),



the memory grove focuses on a circular cairn topped by a glacial boulder. At Hagebyhöga (Ög), the memory grove has one stone with the word *minneslund* balanced on three others, giving the appearance of a miniature megalith. Elsewhere, memory groves incorporate tricorn stone-settings, mimicking a monument form of the Scandinavian Iron Age (Björkeberg church, Ög and Gardlösa, Öl). Meanwhile, boat-shaped arrangements are employed for flower-holders (Vreta Kloster, Ög and Hossmo, Sm), seating areas (Lagga, Up) and the memory grove itself (Gothem, Go), subtle allusions to the widespread occurrence of this monumental form in the Swedish Bronze and Iron Ages.

Viking rune-stones are also alluded to in some memory groves. The winding shape of the path of Resmo's (Öl) memory grove seems to reflect a common shape used in rune-stone text-bands. In Mjölby (Ög) cemetery, a stone placed in the 1970s as the focal point of the memory grove within a typical woodland cemetery landscape is inscribed with a pseudo-runic inscription (Fig. 20.1). It recounts lines from a popular Swedish hymn. Close by is a 'replica' historic bell-tower to give the woodland cemetery a further aura of antiquity.

Newly-created sculpted stones also provide the aura of history for memory groves. At Öja (Go), Runsten (Öl) and Algutsrum (Öl), the focal stones of the memory groves are crosses reminiscent of historic gravestones. Obelisks (Hjortsberga, Bl), columns (Ängsö, Vs), miniature graveslabs (Overgrans, Up), and the many water-worn boulders discussed above also resonate with 19th century forms found elsewhere in historic churchyards and cemeteries. At Smedby (Öl), the memory grove is marked by a slab upon which a cross with a wreath is incised *minneslund* – a 19th century memorial depicted upon a 21st century memorial. Wooden crosses take on a similar role, particularly on Öland as at Köpingsvik, Gårby, and Föra. Meanwhile at Resmo (Öl) the focal cross is in iron with a central dove, seemingly mimicking an antique form of gravestone. Furthermore, modern 'medieval' spolia comprise architectonic settings in memory groves at Martebo (Go) and Väskinde (Go).

In many memory groves, walls provide borders or features, explicitly imitating the historic dry-stone walls of churchyard and



Figure 20.3: Tingstad (Ög) memory grove is situated beside a rock outcrop on the eastern edge of the churchyard, the grove is bounded by the churchyard's drystone boundary-wall (east), a pair of evergreen trees and a natural rock outcrop to the left (north), a lantern, bench and flower-bolder beside the path to the right (south) and modern grave-plots in the foreground (west). Photograph: Howard Williams 2009



Figure 20.4: Hulterstad (Öl) memory grove incorporating the 19th century gravestone of a local smith. Photograph: Howard Williams 2007



Figure 20.5: Memory grave at Glömminge (Öl) incorporating a 19th century iron cross memorial as a centre-piece behind a pond flanked by lanterns. Behind the hedge and two benches, further iron and stone 19th century grave-markers form a backdrop together with the churchyard's drystone wall boundary and the southern-end of a medieval farm building. Photograph: Howard Williams 2007

cemetery boundaries. Examples include Kalmar (Up), Tofta (Go), Sandby (Öl), and Uppsala Näs (Up). A further use of walls is at Låbro (Go), where the octagonal walls of the grove and the fountain within it replicate the form of the adjacent octagonal church tower.

Old iron is also employed to invoke the past. Old black-painted iron objects (or black plastic skeuomorphs of iron) constitute a regular component of memory groves. These include the lanterns for placing candles, flower-holders, fences, and street-lamps along pathways to the memory grove. Likewise, a large black iron chained fence defines the boundary of Haga's (Up) memory grove. Östra Husby's (Ög) memory grove is adjacent to the church and is purely contemporary in material terms. Yet the signs at the entrance are in large old Gothic lettering. Vases and flower holders also presence the antique, although little more than standard forms available in garden centres. Examples include the stone-coloured vases at Hagebyhöga (Ög) and Föra (Öl) and the black metal flower holders at Lundby (Sö) and Gistad (Ög).

These antique themes also pervade ash groves. For example, in Motala's suburban cemetery and crematorium (Ög), one ash grove resembles a prehistoric cemetery of circular mounds. Another is overtly archaeological in design inspiration: it is a boat-shaped stone setting (Fig. 20.2). Many of Motala's residents are being commemorated in true prehistoric fashion.

### *Reusing the past*

Drawing on long-established traditions of the use of the ancient past in cemetery and memorial design (see Holtorf 1996), clearly Swedish landscape designers have had a field day in appropriating the prehistoric, medieval, and post-medieval for the commemoration of the contemporary cremated dead. Yet the past is also reused materially, and not just conceptually, to afford memory and ash groves with a sense of antiquity.

There are instances of Viking rune-stones and medieval grave-slabs incorporated into memory groves in rural contexts. These are rare since such ancient monuments are usually proudly and prominently displayed on the main approaches to the churchyard or close to the church. Yet at Tingstad (Ög), three rune-stones

are given a prominent position on a natural ridge at the south-eastern, 'private' end of the churchyard opposite the main entrance in the north-west corner. Here the memory grove has been designed around, and incorporating their situation, the rune-stones now occupying the space where ashes are interred (Fig. 20.3).

More commonly, 19th century stone and iron memorials are re-used as the foci of recent memory groves; the memorialised individuals receive a second-life in death as adopted ancestors for the modern cremated dead. For example, in the churchyard of Hulterstad church (Öl), the memory grove was constructed in 1997 and is situated within the western side of the northern churchyard boundary (Fig. 20.4). The limestone cross is the gravestone of village blacksmith, Lindström, who died in 1870. The stone has been reversed: the original inscription is now on the back of the stone and the word *minneslund* has been newly inscribed on the front (Jonsson 2006, 13). In other cases, the reused character of memorials is more explicit. On Öland, 19th century iron crosses provide foci for memory groves at Stenåsa and Ås. Also on Öland at Glömminge church, an iron cross is reused as the focus of the memory grove while iron and stone 19th century gravestones are displayed prominently behind the memory grove and in front of a medieval barn gable that comprises the churchyard boundary at this point (Fig. 20.5).

Memory groves re-use a wide range of other churchyard *spoli* that serve as collective mortuary monuments: iron anchors are adapted from their occasional use on traditional gravestones in maritime communities (eg, Skallvik, Ög and Sankta Anna, Ög). At Hjortsberga church (Bl), a stone drinking trough is re-used to contain flowers. Elsewhere, old iron water pumps serve new functions to dispense water into fountains (Gistad, Ög) and for mourners to water flowers (Räpplinge, Öl). At Gräsgård church (Öl), a monumental cross was originally placed to the west of the church in the 1960s. This was subsequently incorporated as the focus of the new memory grove in the 1990s (Johansson 2006). Other reused stone features include those at Styrstad (Ög) where two quernstones are reused as flower-holders and act as foci for the memory grove. In each case, their antiquity offers counterpoint to the stark modernity of these new commemorative spaces.



**Re-using landscapes**

Memory and ash groves augment and transform existing cemeteries and churchyards. As mentioned above, the groves are usually situated opposite the main entrances, facilitating private prayer and contemplation. This creates a repeated spatial choreography of engaging with past material culture for any visitor approaching the memory grove. Visitors must pass by recent grave-plots but also the historic church building itself with its associated displays of rune-stones, medieval and early modern gravestones. Far older monuments sometimes frame the approach to memory groves. For example, at Furingstad church (Ög) two rune-stones are displayed outside the main southern approach to the churchyard, while to the west of the churchyard boundary there are two more placed against a backdrop of a later prehistoric cemetery as well as sign-posted prehistoric rock-art. Once within the churchyard, the memory grove has been created on the 'private' northern side of the church, visible only once the building has been circumnavigated.

However, there are instances where grove design and location make explicit connections with the material pasts of the churchyard. Most commonly, the groves are situated adjacent (usually within, but sometimes without) the historic churchyard boundary. A further explicit association with ancient mortuary monuments can be seen at Skärkind (Ög): four historical iron memorial crosses have been displayed in the churchyard extension beside the path leading only to the memory grove. The attendant sign reads: 'The grave markers, which reflect a piece of Skärkind's history, were found in the attic of Skärkind church. Their original placement is not known' (Translation by Martin Rundkvist). The memory groves are thus enmeshed into a sense of experienced history, a revitalised topography of memory drawing off associations with both prehistoric monumental forms and the historic churchyard.

An intriguing instance of memory groves reusing a location of sacral significance occurs at Kila church (Sö). Here, it appears that the current church is modern, while the memory grove has been positioned over, and replicating, the footprint of the historic church (Fig. 20.6). This ground-plan is memorialised in a cross-shaped arrangement

of low hedges within which the memory grove has been created. The grove's focus populates the eastern arm, seemingly juxtaposed over where the church's high altar had been. Two graveslabs with iron corner-rings, typical of the late 17th and early 18th century, have been located to flank the memory grove's western approach. Once again, the modern cremated dead revitalise the churchyard's topography and draw on its ancient use as a site of worship and commemoration.

In further cases, memory groves 'reuse' abandoned or disused commemorative landscapes in town and country. Krokek church (Ög) is situated on the border between the historic provinces of Södermanland and Östergötland. The church was destroyed by fire in 1889 (Raä Krokek 28:1) and behind the churchyard is a 17th century border stone between the provinces (Raä Krokek 29:1) and an historic inn building (Raä Krokek 29:1). The churchyard contains the ruined walls of the church and many gravestones and iron crosses of 18th and 19th century date, re-erected and conserved as a site of historic interest for tourists. Yet the memory grove simultaneously revitalises the churchyard as a destination for local mourners (Fig. 20.7). For this abandoned church site, the grove is situated in a position never encountered for memory groves built at extant churchyards surrounding churches still in use: it is situated just inside the main (western) entrance and on the south side of the only path leading to the ruins.

A related situation to that of Krokek was encountered at Sankt Anna (Ög). The memory grove adapts the burial ground of an old medieval chapel (Fig. 20.8). Meanwhile the post-medieval church located 750 m to the south has none (Raä Sankt Anna 5:1). The grove's focus includes overt antique material culture including an iron anchor (mentioned above), reflecting the chapel's maritime proximity. Meanwhile a pair evergreens, usually framing a memorial stone in memory groves are here framing the chapel's southern door, incorporating the chapel into the grove's memorial design.

A further example of memory groves reusing abandoned mortuary locations can be seen at Rälla (Öl). Here, on a small hillock in a pine forest setting, a small, short-lived private family burial ground was constructed between 1932 and 1936 by Emil Persson (Figs 20.8a & b). From 1943, five family graves were interred





Figure 20.6: Kila church (Sö). The entrance to the memory grove flanked by two late 17th century grave-slabs. View from the south-west. Photograph: Howard Williams 2009



Figure 20.7: Krokek (Ög) old church, Raä Krokek 28:1 – the memory grove is situated on the path leading to the church ruin set amidst many historic gravestones. Photograph: Howard Williams 2009



Figure 20.8: Anchor as focal point of the memory grove on the south side of the chapel of St Anna (Ög), the memory grove also contains a bell tower and wooden cross. Photograph: Howard Williams 2009

within it, focusing on a large natural upright stone (Jonsson 2007, 8). This cemetery was itself in a deliberately antique style, seemingly inspired by the *en vogue* ideal of a woodland cemetery, the form and exclusive location symbolising the family's social status and aspirations (Jonsson 2007, 8, 12). The entrance to the burial ground mimics a 17th century lychgate, similar to those found at churches close by. Meanwhile, the dry-stone wall replicates those around Öland's historic churchyards. The antique memorial text above the entrance records its foundation in 1932. In the 1990s, the memory grove was constructed, populating the pine forest around the burial ground's southern side. The grove serves the parish of Högsrum and the parish church itself therefore has no memory grove (Ring 2006, 14). The edge of the grove merges with the forest, its boundary marked only by low wooden stakes. Its focus is a large, simple wooden cross. These examples show how historic cemeteries attract groves and afford them with the aura of timelessness and nostalgia that seems integral to their commemorative programme of memory groves

## Conclusion

Developing from the 19th century reinvention of cremation, most European archaeologists now inhabit landscapes punctuated by crematoria and peppered with locales where human ashes are displayed, stored, interred, and scattered. Cremation today is well-established and highly sophisticated in both technological and commemorative terms. Crematoria and their grounds are efficient industrial installations for reducing cadavers to ash by burning and crushing, but they are also secular, multi-cultural landscapes of memory. Furthermore, cremation memorials adapt and revitalise existing and abandoned traditional commemorative and sacred spaces and ashes are increasingly dispersed in a wide range of other public and private locales (see for example, Williams 2011b). Our entire landscape from football grounds to archaeological sites, from rivers to mountain tops, are now places where ashes are dispersed and loved ones are mourned. The task of further work in the contemporary archaeology of cremation is now to explore the fine-grained variability in how ashes are used to create different bonds between the living and the dead through their disposal



and association with contrasting material cultures, monumentalities, and landscapes (see Williams 2011b).

Yet archaeologists have been slow to recognise the impact of the irregular personal engagement, but cultural ubiquity of cremation in Western popular culture and society. Less still have they explored the importance and potential of studying the material cultures and landscapes of the contemporary cremated dead. Doing so may provide new insights and perspectives upon death in the human past, but even if it does not, archaeology has considerable potential to shed novel perspectives on the material cultures and landscapes of cremation today and those planned and envisaged for the future. At the very least, modern cremation deserves more than its stereotype in archaeological writings.

The memory and ash groves of Sweden might superficially appear depersonalised modernist spaces where the dead are forgotten. Instead, I argue they are one instance where multiple temporalities continue to be powerful in contemporary Western late modern societies' commemorative practices. Memory groves create a sense of nostalgia and primordial antiquity through their geological, botanic, and archaeological designs and their integration into pre-existing churchyards and cemeteries. I explore the replication of the past in memory groves elsewhere (Williams 2011a), but here I have focused on the re-use and incorporation of past material culture as well as the locations of memory groves in ancient commemorative environments.

This case study sheds an alternative perspective on the use of the past in the present. Swedish memory groves cannot be regarded as the use and abuse of the past for political ideology, entertainment, branding goods, heritage, tourism, to wallow in nostalgia, or even construct specific social identities (eg, Holtorf 2005, 92–111), although elements of these are clearly at play. Instead, here the past is principally a powerful commemorative medium for mourning and personal remembrance. In this regard, I am reminded of Richard Bradley's 2002 discussion of the 18th century landscape of Stourhead. Despite the overt contrast between grandiose 18th century landscapes around British country homes and the miniature landscapes created in modern Swedish churchyards, they share in being



*Figure 20.9: a) the family burial ground with an antiquated entrance set on a knoll within the memory grove, Rälla (Öl); b) the Rälla (Öl) pine forest memory grove established in the 1990s adjacent to the 1930s family burial ground. Photographs: Howard Williams 2007*



'gardens of time' (Bradley 2002, 157). These are landscapes where the past is presented in order to transcend time, but also to sustain private and intimate emotional bonds between the living and the dead. The combination of ash and antiquity render memory groves places to imagine the dead in future destinations and root them in deep antiquity.

This paper has touched upon a number of themes that Richard Bradley has investigated through his long and illustrious archaeological career. I hope that in a very small way it serves to celebrate Richard's outstanding contribution to archaeology, but more specifically to thank him for his generous and steadfast support for my attempts to study the archaeology of death and memory since my time as a student at Reading to the present day. I would also like to acknowledge the enduring inspiration Richard has provided for me, not only through the quality and range of his numerous archaeological writings, insightful questions, constructive comments, lengthy anecdotes, and encouragement in the use of bad puns for paper titles (sadly resisted in this instance), but also by his exemplary example. Perhaps more than all of this, Richard has inspired me never to lose my archaeological nerve.

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# In the Wake of a Voyager: feet, boats, and death rituals in the North European Bronze Age

*Joakim Goldhahn*

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*An attempt is made here to contest some well-recognised concepts and categories in the study of Bronze Age rock art in northern Europe. The goal is to challenge the conventional distinction between the rare but precious rock art images found in closed burial contexts and the more common finds of rock art on outcrops in the landscape. An historical background to how these different rock art categories were established and became orthodoxies is first presented. The relationship between open-air rock art and burials is then highlighted, and shows that rock art was made in connection with extended burial ceremonies and rituals during the Middle and Late Bronze Age. It is suggested that the placing of the art inside, outside, or on prehistoric monuments was secondary to its many meanings. The same combination of feet and boat images is to be found both inside burial monuments, on them, and just outside them. It therefore seems to be unfruitful to categorise rock art solely according to whether it is placed inside or outside burial monuments. Instead, it is argued that the interpretation of rock art's significance must be based on manifold criteria, such as its iconography, its structure, its relationship to other prehistoric remains, and its setting in the landscape*

## **On the benefits and joys of voyaging**

There is probably no voyager who has failed to be fascinated by the new impressions she or he experiences on their journey. It is as if every sense is alerted. With new horizons come new smells, sounds, tastes, landscapes, and people. The whole world becomes a little more perceptible, a little more subtle. The quotidian life, including good and bad habits, becomes difficult to sustain. In the meeting

with the new and the different, we discover pages of ourselves that we did not know about, that we belittled, or forgot. Spending time in other places provides opportunities for learning new things about other cultures and their life worlds. Another of travel's benefits and joys is the chance it gives us of detecting and bringing out the often unspoken prejudices we all have. The meeting with the 'Other' gives us the opportunity to figure out a little bit more about ourselves. And as the great voyager Odysseus

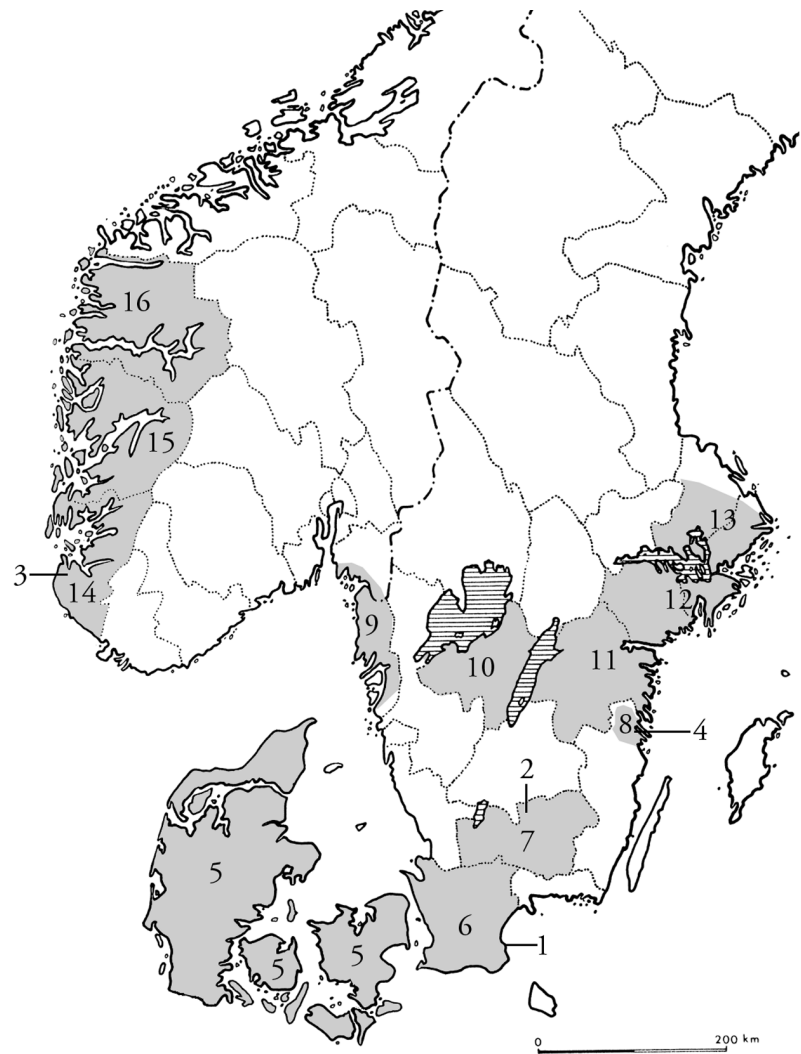
teaches us, the homecoming may bring new insights about the once so familiar life world we often take for granted.

To me, the essence and joy of travel is clearly illustrated in Richard Bradley's inspiring research. Few if any archaeologists I know have travelled so extensively and combined this with such thought-provoking studies. Over time, travelling and exploring new horizons, Richard has been able to develop a rare capacity to see the unexpected and to highlight the perhaps most difficult of all – things that are taken for granted which enable us to get to the heart of the matter. As a Swede, I see Richard as an archaeological counterpart to the film director Colin Nutley. As an outsider, Nutley has a remarkable gift for spotting and revealing what is odd and peculiar in Swedish society. In many ways, his intriguing movies have captured the heart and soul of Sweden in a manner that an indigenous Swede would find it hard to achieve. In a similar manner, Richard has uncovered many unspoken prejudices in North European archaeology and presented a long list of novel and thought-provoking interpretations. More than once, relationships and patterns in the archaeological record that were formerly unthinkable have been revealed and transformed into the thinkable.

This article, motivated and inspired by Richard's many travels and extensive research in the Scandinavian countries (Fig. 21.1), is an attempt to contest some well-recognised concepts and categories in the study of Bronze Age rock art in northern Europe, approximately 1700–500 cal BC. The goal is to challenge the conventional distinction between the rare but precious rock art images found in closed burial contexts and the more common finds of rock art on outcrops in the landscape – the often nurtured distinction between rock art made for the living and for the dead. The first step is to present a historical background to how these different rock art categories were established and became orthodoxies. After that I shall try to show how this perception of form can be reassessed and how problems created in the past can be transformed into new opportunities in the future.

### On the creation of rock art categories

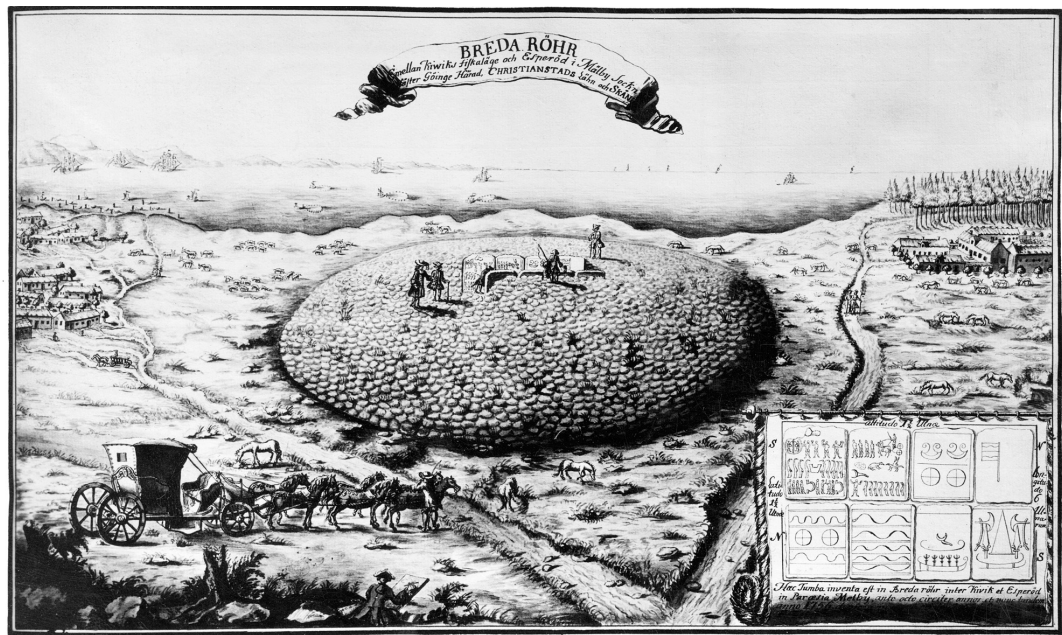
Our knowledge of north European rock art



stems from a bright summer night in 1748 when two local farmers, Lasse Pärsson and Andreas Sahlberg, discovered the decorated burial cist Bredarör on Kivik (Goldhahn 2009). They plundered the large, broad cairn for eight days and then came up against an oversized cist. Before venturing further they protected themselves from ghosts and evil spirits by striking a light against iron and lighting their pipes. They stayed all night. This immediately gave rise to a rumour that they had found a valuable treasure. They denied this to no avail and soon found themselves in custody. A month later an extraordinary trial was held that took three days and generated a historical document of more than 50 folio pages. A year later they swore themselves free of the accusation that they had failed to divulge half of the treasure's value to the Swedish state.

*Figure 21.1. Map of Scandinavia showing the places and areas mentioned: 1) Bredarör on Kivik; 2) Öbr; 3) Rege; 4) Törnsfall; the rock art area in 5) Denmark; 6) Scania; 7) Kronoberg; 8) Tjust; 9) Northern Bohuslän; 10) Västergötland; 11) Östergötland; 12) Södermanland; 13) Uppland; 14) Rogaland; 15) Hordaland, and; 16) Sogn og Fjordane*

Figure 21.2. The discovery of rock art of Bredarör on Kivik in Scania, Sweden, 1756 (after Goldhahn 2009)



Strangely enough, the record of the trial does not mention that the Bredarör cist was adorned with rock art. The images were detected in 1756 by Nils Wessman on an antiquarian journey to the former Danish counties of Blekinge and Scania (Fig. 21.2). He was also the first to excavate Bredarör and reported the find of an urn with burnt bones in the decorated cist.

Wessman's publication of his discovery some years later started a heated debate about how the rock art at Bredarör should be explained. Oddly enough, the main feature of this debate is still current in the contemporary field of archaeology. Some researchers, including Wessman and Lagerbring, interpreted Bredarör as an exotic monument with continental origins, in this case a result of a Roman invasion. Nils Brocman and others saw Bredarör in a more local and regional context in which the main source of inspiration was the Icelandic sagas. Sven Nilsson is a representative of the 19th century's rather outlandish interpretations and regarded the Kivik monument as a Phoenician sanctuary, while Oscar Montelius advocated the bread-and-butter regional perspective (Goldhahn 2009). Nowadays, researchers such as Klavs Randsborg (1993), Kristian Kristiansen, and Thomas Larsson (2005) vividly favour the exotic interpretation, while Peter Skoglund (2005) and myself support more down-to-earth perspectives (Goldhahn 1999; 2005; 2007; 2008a; 2009).

The discovery of Bredarör and the subsequent debate can be seen as a starting point for research into the meaning and significance of South Scandinavian rock art. Following Christian Jürgensen Thomsen's (1836) presentation of the Three Age System, most researchers agreed that the rock art from Bredarör should be dated to the Bronze Age. The cist's depicted axes and geometric patterns were indicative (Fig. 21.2). The question of how to date and interpret the more conventional rock art found on open-air sites remained more open. Some researchers attributed it to primitive Stone Age savages (Brunius 1868), others associated it with the noble Vikings and the Iron Age (Nilsson 1838–62; Holmberg 1848). No one championed a Bronze Age date.

What we have here is the creation of two distinct categories of rock art, those from burials and those from open-air sites, a distinction that I wish to explore and question in the following.

### *On rock art for the living*

This chronological dispute came to an end in 1868 when Bror-Emil Hildebrand (1869) made plaster casts of sword depictions at Ekenberg in the county of Östergötland and compared them with a real Bronze Age sword from the same area (Goldhahn *et al.* 2010). The result was convincing and from then on the chronological debate about South Scandinavian rock art



has concentrated on establishing reliable chronologies. A common denominator in these chronologies is that rock art from closed burial contexts is used to date those from open-air sites (eg, Malmer 1981; Mandt 1991; Kaul 1998; Sognnes 2001; Myhre 2004; Vogt 2006; Ling 2008).

After Hildebrand's pioneering work, increasing attention was paid to the meaning and significance of specific rock art images and their settings in the landscape. During the 19th century, rock art locations in the landscape were reconstructed with the aid of rock art images. The researchers were all well aware of the progress of land elevation in this part of world. The main figurative and dominant motif – the countless thousands of boat depictions, pecked on the rocks along the former shores of the Scandinavian peninsula – was taken to indicate the sites of ancient ports (Holmberg 1848; Brunius 1868; Hildebrand 1869).

During this epoch, several researchers interpreted rock art as a feature of burial rituals (eg, Montelius 1898). The closed find context was significant. In the early 20th century this interpretation was supported by new finds and elaborated by researchers such as Eyvind de Lange (1912), Gunnar Ekholm (1917), and Arthur Nordén (1918). However, a challenge soon came from an examination of the relationship between the contemporary landscape and the placing of rock art.

An example of this new approach is Oscar Almgren's seminal study from 1927, *Rock Art and Cult Practices* (my translation). Strongly influenced by Gustav Kossinna's *Seidlungsarchäologie* (Kossinna 1911), Almgren sought to link Bronze Age religion with ethnological sources and an Indo-European cult complex to prove that Swedes had lived in Sweden since the last Ice Age. Almgren was truly overwhelmed by the close relationship between Bronze Age rock art and contemporary arable land and he argued that the rock art had been made in the vicinity of Bronze Age settlements (cf. Bradley 2006a; Ling 2008). According to him, the rock art was made for the living. The thousands of boat depictions in Scandinavia were literally attached to the ground and explained as symbolic cult boats that were used in the surrounding of arable land to ensure Bronze Age farmers sun and rain. Almgren drew support from Cornelius Tacitus' *Germania* from around AD 98 and the dozens of rock

art images that depict ploughing. The exception constituted the rule.

Almgren also explicitly sought a single, comprehensive theory that would explain all rock art images (Almgren 1927, *passim*). This tended to result in contradictory conclusions; for instance, his statement that rock art was made for the living was hard to apply to rock art from burials (Almgren 1927, 256–8, cf. Goldhahn 2008a). His followers often faced the same paradox. They were more than happy to use rock art from burials to establish chronologies for the open-air rock art but had little or nothing to say about their social, political, ritual, and religious meanings and contents.

An illustrative example of this inconsistent attitude is Hans Rostholm's critical review of P.V. Glob's observation that rock art from Danish Bronze Age burials often was 'freshly pecked and therefore had to have been made in connection with the burial ritual' (Glob 1969, 159, my translation). In his seminal study from 1969, *Danish Rock Engravings* (my translation), Glob stated that 37 out of 104 portable slabs with rock art had been found under 'safe conditions', which indicated that they were made as an integral part of death rituals (Glob 1969, 159). Rostholm was more sceptical. He accepted only 21 cases, rather less than 20% of the figurative rock art that had been found on portable slabs in Denmark. His remarkable conclusion from this clear-cut pattern was that 'the rock art's relation to the creation of the burial monument could not be proved' (Rostholm 1972, 27, my translation). Moreover, he considered that this was confirmed by the evident fact that 'most of the rock art elsewhere in Scandinavia is found on open-air sites without connection to burial monuments' (Rostholm 1972, 28, my translation). This meant that the 93 (out of 114) rock art slabs from Denmark that were regarded as stray finds – *without contexts* – were used to interpret those that had been found *in a context*. Archaeologists are sometimes far more entertaining and interesting than the archaeology they interpret.

### ***On rock art and landscape***

Almgren's normative thesis was not challenged until the celebrated '68 generation. It became a paradigm (Prescott 1994; Lødøen & Mandt 2010). Knut Helskog (1993) even characterised Almgren's thesis as 'an intellectual



straightjacket'. Winds of a change appeared under the influence of the New Archaeology. One of the pioneers, Gro Mandt (1972), used the placing of rock art as an interpretive variable in her Masters thesis on Bronze Age rock art from Hordaland in Western Norway. She convincingly argued for a more scientific approach, free from the influence of Almgren's cult paradigm. Instead, Mandt used the placing of rock art and its relationship to other contemporary prehistoric remains as a means for investigating its meaning and significance (Mandt 1978; 1991).

At about the same time, Jarl Nordbladh used Åke Fredsjö's vast documentation of the rock art from Kville parish in Bohuslän to declare a semiotic prolegomenon for Scandinavian rock art research (Nordbladh 1978). He also used the spatial distribution of rock art in the landscape and its relationship to prehistoric remains to argue that the placing of rock art was cognitively intentional and meaningful. Different prehistoric remains were found in different zones in the landscape but they bore a visual relationship to each other (Nordbladh 1980, 44–5):

Prehistoric remains	Element
<i>High</i>	
Burial monuments	Mountains/hills
Settlements	Sand/moraine
Rock art	Clay
Deposits	Water/bogs
<i>Low</i>	

In a similar mode he applied structuralism to argue that the meaning of rock art was not to appease invisible gods, but had more to do with communication between living human beings. He also demonstrated that the meaning of particular images was to be found, not in the connotation of the images themselves but in the way they were combined with each other (Nordbladh 1978; 1980; also Tilley 1991).

Both Mandt and Nordbladh argued for a more explicit use of theory in rock art research. Their studies also suggested that the placing of rock art in the landscape is an essential factor for a better understanding of rock art's many meanings and significances (Bradley 1997b). This was important, not least as it led to an insight that our results and answers are dependent on the *questions we ask* and the *way we treat and relate prehistoric remains to other contemporary phenomena*. All this was in line with

the means and goals of the New Archaeology. Later, in the 1980s, these insights led researchers to apply statistical and spatial analysis to rock art research in Scandinavia (eg, Kjellén & Hyenstrand 1977; Burenhult 1980; Sognnes 1983; 1987; 1990; Larsson 1986; Bertilsson 1987). But while these studies contributed new knowledge about the character of Bronze Age societies, little or nothing happened in analyses of the meaning and significance of particular rock art images. The same was true of the rock art found in burials.

### *On open-air rock art for the dead*

In the late 1990s, Richard's extensive travelling schedule brought him to Scandinavia to do research on Bronze Age rock art. The first articles, with the enigmatic titles *Death by Water* and *Dead Soles*, were clearly inspired by Nordbladh's prologue (Bradley 1997a; 1999) but Richard introduced a new element. First and foremost, he combined Nordbladh's various approaches and presented an analysis of some of the most common rock art images: footprints and boats. As a frequent and cautious voyager, I believe it was not a coincidence that these particular rock art images caught Richard's attention, though both images are strong metaphors for motion and travel, not least for the last journey to the far side.

Throughout his Scandinavian odyssey, Richard showed that these images were often placed in a visual relationship to burial monuments, usually a cairn, but were depicted in two different ways, enhancing different kinds of motion (Fig. 21.3). The feet seem to walk down (usually) or up (unusually) the rock panels, providing a vertical movement between the symbolic zones of burial and settlement. The feet images provided 'a link between ... the land of the living and the place where people are buried' (Bradley 1999, 661–2). According to Richard, the depicted feet were made as a symbol of the deceased's last wandering, from the realm of the dead down to the domains of the living, possibly as a metaphor for rebirth. Depictions of boats, on the other hand, were aligned with the horizon (Fig. 21.3), which Richard related to Bronze Age beliefs and the commonly spread idea that the deceased journey to the land of the dead in a boat (Bradley 1997a; 1999; see also Bradley *et al.* 2002; 2010; Ballard *et al.* 2004; Bradley 2006a; 2009; Bradley & Widholm 2007a; 2007b).

A fact that favours this interpretation is that the same iconography and relationship between open-air rock art and burials occur in other parts of Scandinavia, for example in the Swedish counties of Scania (Bradley 1999; Coles 1999; Tilley 2004; Nord 2009), Kronoberg (Skoglund 2006), Västergötland (Jankavs 1999), Östergötland (Nordén 1925; Wahlgren 2002), Bohuslän (Bradley 1999), and Uppland (Coles 2000), as well as in Hordaland and Sogn og Fjordane in Norway (Mandt 1991; Wrigglesworth, 2007; Lødøen & Mandt 2010). Another benefit of this thought-provoking interpretation is that it challenges the explicit modernistic distinction between open-air rock art for the living and burial rock art for the dead. As we saw, these categories were created during the 19th century AD, manifested in the early 20th century in the seminal work of Almgren (1927) and have flourished ever since.

In another context (Goldhahn 2007, 245, with references), I have underscored the differences between these rock art categories as follows:

Rock art from burials	Rock art from open-air sites
Inaccessible	Accessible
Inside	Outside
Closed	Open
Dark	Light
Earth	Sky
Down	Up
Inwards	Outwards
Individual	Communal
Private	Public
Few	Many
Portable slabs	Stationary panels
Abstract	Concrete
Iconographic	Scenes and rituals
Newly pecked	Re-pecked

In order to question this rather naïve categorisation and transform the problem into a new opportunity, I think it is necessary

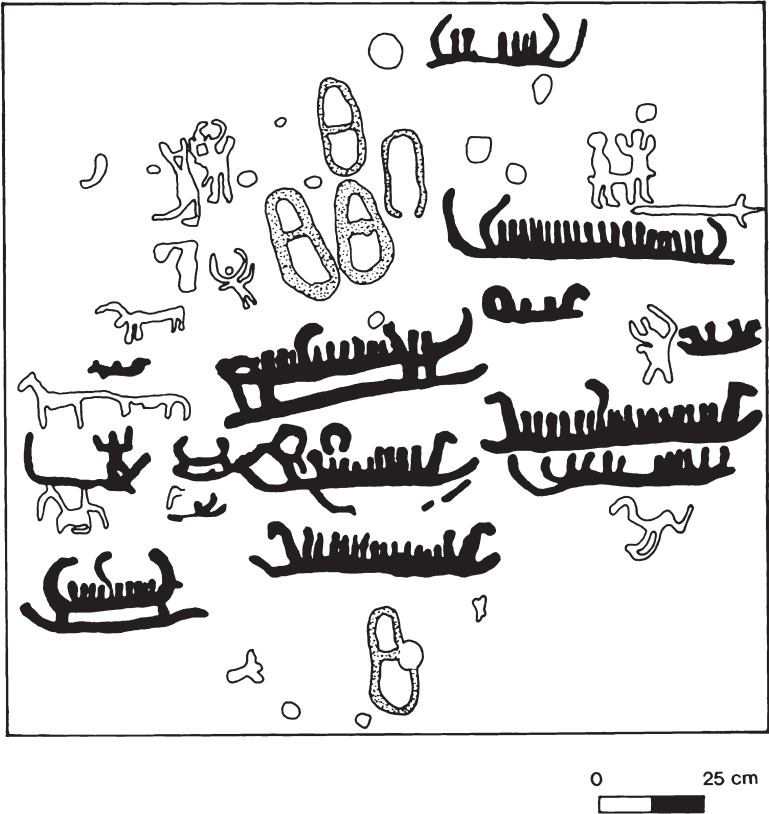


Figure 21.3. Feet and boat images from Bohuslän in Sweden (after Bradley 1997a)

and important to incorporate the ‘Other’ rock art – rock art found in burial contexts – in the analysis.

On feet images from burial contexts

There are several instances of feet images on the roof slabs of megaliths and on the kerbstones of burial monuments in Scandinavia (Lindkvist 1911; Glob 1969; Jankavs 1999; Kaul 2004; Lødøen & Mandt 2010), but they are hard to date and contextualise. Theoretically, the images could have been added at any time after the monument was created. Neither can we ignore the possibility that old treasured boulders or slabs were used in the creation of new monuments (eg, Bradley 1998; 2002).

Even when rock art is found *in situ* in burials, the context can be hard to discern. One reason for this is that many of the excavations were carried out a long time ago, when their quality and the expectations that guided them left much to be desired (Gansum 2004). In some cases, archaeologists were not involved. In others, the rock art was hard to detect, being covered with stone, earth, and gravel; in many

Table 21.1. Example of feet images from burial contexts in Bronze Age Scandinavia

Place	Dating	Context	Other	Reference
<i>Denmark</i>				
Bahl	BA	A	–	Glob 1969
Truehøjgård	Period II, MBA	C	B, H	Glob 1969
<i>Germany</i>				
Klein Meinsdorf	Period II, MBA	C	C, c, h,	Capelle 1971
Bunsöh	MBA	C	C, c, h,	Capelle 1971
<i>Norway</i>				
Myklestad	MBA	–	–	Mandt 1972
Steinhaug	MBA	C	–	Myhre 2004
Myklebust	MBA	C	–	Myhre 2004
Rege II	Period II, MBA	C	B	Myhre 2004
Vestre Løkke	LBA	A	h	Johansen 1971
Jong	LBA	C	–	Simonsen & Vogt 2005
<i>Sweden</i>				
Anneslätt	BA	C	B, C, c	Bertilsson 1986
Slutarpdösen	–	–	C	Lindkvist 1911
Tuna I–III	MBA	A	B, c	Montelius 1898
Lilla Ryafällan	LBA	C	A, c, H	Skoglund 2006

*Dating:* BA = Bronze Age, MBA = Middle Bronze Age (1600–1100 cal BC), LBA = Late Bronze Age (1100–500 cal BC); *Context:* A = Analogy, C = Closed context; *Other* = Other images: A = Animals, B = Boat, C = Circle motif, c = Cup mark, H = Human being, h = Hand image

instances it was not spotted until after the slabs had been moved from their ‘original place’ in the monument and heavy rain had washed the slabs or panels clean (Goldhahn 2007, 245–7).

Even so, there are ample finds of rock art from burials in Scandinavia; more than 350 cases are known today. Table 21.1 lists some heuristic examples from burials where feet images are included. These finds include some earlier, more doubtful cases, such as Tuna in Ytter-Enhörna parish in Södermanland, Sweden (Montelius 1998), but also examples where the rock art clearly relates to the death ceremonies and the rituals associated with the creation of the burial monument (Glob 1969; Capelle 1972; Bertilsson 1986; Kaul 1998; 2004; Goldhahn 1999; 2005, 2007; 2008a; Myhre 2004; Skoglund 2006). The table shows that feet images have been found in burials from the Middle as well as the Late Bronze Age (here 1600–500 cal BC), and that such finds are known from Denmark, Germany, Norway and Sweden.

An illustrative example from the Middle Bronze Age is a burial mound from Rege, a farm in Rogaland in south-western Norway

(Myhre 2004). The barrow was 18.5 m in diameter and 3 m high. The rock art was found in an ingeniously designed cist and consists of cup marks, depictions of feet and boats (Fig. 21.4). The dating of the barrow is somewhat uncertain but the context indicates Middle Bronze Age period II, c. 1500–1300 cal BC (Fett & Fett 1941, 79–80; Myhre 2004).

Another evocative example comes from Lilla Ryafällan in Örs parish in the county of Kronoberg in southern Sweden (Skoglund 2006; Goldhahn 2007). Here, in the early 1920s, Knut Kjellmark discovered some 350 cup marks in close relation to a cairn and a stone setting (Skoglund 2006, 76–7). The burial monuments covered parts of the panel decorated with cup marks. Both contain burnt bones and Bronze Age pottery. The cairn also contained a small square burial cist that suggests a dating to the Late Bronze Age, c. 1100–500 cal BC.

The exact relationship between the burials and the rock art is difficult to figure out in this case because Kjellmark did not document his excavation. Still it is clear from the remaining part of the larger cairn, which was 14 m in diameter and about 1 m high, that it was partly superimposed on some of the cup marks.

Another interesting feature that Kjellmark mentioned is that a small ‘cremation pyre’ (my translation), slightly over 1 m in diameter, was found beneath the smaller stone setting, which was 5 m in diameter and 0.25 m high (quote after Skoglund 2006, 41):

‘It rested on a rock panel gently sloping eastward on which there were cup marks. The cairn was mixed with earth. Around its middle there was a spot [...] that contained black soil and charcoal, thus possibly traces of a cremation pyre.’ (my translation).

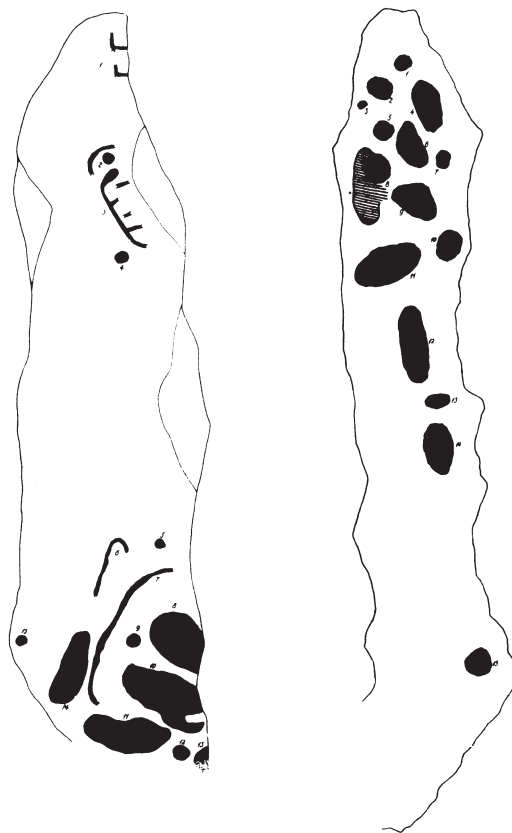
Additional rock art was discovered on this panel in 2001: 32 feet, 3 horse motifs, 3 coils, 2 snake images, 1 human being, 27 cup marks, and more than 75 fragments (Skoglund 2006, 30). All the images were pecked but very shallow; some of them are only visible in artificial light, and they all give the impression of being made specifically for the burial ritual. Most likely the smaller cairn mentioned by Kjellmark covered the remains of the pyre and the rock art, which explains why the outlines of the images are still so crisp. This interpretation is supported by the fact that the mentioned cremation pyre has destroyed some of the depicted feet images (Fig. 21.5, see Skoglund 2006, 43–4; Goldhahn 2007).

A conclusion we can draw from this short presentation is that rock art was made in connection with extended burial ceremonies and rituals during the Middle and Late Bronze Age (eg, Randsborg 1993; Kaul 1998; 2004; Goldhahn 1999; 2005; 2007; 2008a; Myhre 2004; Skoglund 2005; 2006) and that many of these instances included the creation of feet and boat images (Table 21.1).

### On merging categories – creating new possibilities

Another lesson to be learned from Richard’s inspiring work is the need to produce and incorporate new empirical data to broaden our knowledge and understanding of past and present societies (Bradley 1997a; 1997b; 1998; 2000; 2002; 2005a; 2005b; 2006b; 2007; 2008; 2009). It is not enough to sit with a computer and think big thoughts with a capital T; we must also take our thoughts with us into the field and confront our prejudices with simple dirt archaeology.

One of Richard’s many fellow travellers on his Scandinavian journeys is Dag Widholm. Like Richard, he is one of the few archaeologists



*Figure 21.4. The cist and rock art from Rege, Rogaland in Norway (photo by the Archaeological Museum in Stavanger and documentation; after Fett & Fett 1941)*

who have questioned the dichotomy between open-air rock art and rock art from closed contexts (also Wigglesworth 2007). During his research on the Bronze Age in Tjust in north-eastern Småland in the south of Sweden (see Bradley & Widholm 2007a; 2007b), Widholm ran into not only some



Figure 21.5. Rock art and exfoliation from Lilla Ryafällan, Ör parish in Kronoberg County, Sweden (photo by Peter Skoglund)



rare cases of rock art from burials, eg, the Hjortekrog cairn (Widholm 1998; 1999), but also relationships between open-air rock art and burial monuments that resembled what Richard discussed in his studies from Bohuslän and Scania. Here, too, the most dominant rock art images were feet, boats, and cup marks. According to Widholm, both categories of rock art were related to burial practices during the Bronze Age. Rock art from burials was obviously made as an integral part of the burial ceremony, and rock art made outside burial monuments was related to repeated commemorative works and ancestral worship – as a symbolic communication between the living and the dead. According to Widholm (1998, 85) ‘the cairn has been built first, and then the open air rock art was subsequently made in continuous rites’ (my translation).

Widholm’s sympathetic interpretation was based on the state of knowledge in the 1990s. Recent surveys of rock art in Tjust have changed the situation in two ways. First, more than 6000 new rock art images and 200 sites with figurative rock art have been found. Second, the relationship between rock art panels and burial monuments is being constantly reassessed. All the panels with a clear visual relation between rock art and burial structures are dominated by feet, boats, and cup marks (Fig. 21.6). At present, about 12 sites are known where these specific relationships can be studied; they occur within an area of 20 square km, which suggests that the pattern is a distinct feature of a local ceremonial tradition.

An interesting fact is that this recurrent, coherent iconography is accompanied by a wide variation in the distance between the



burial monument and the rock art, ranging from only a metre to 10 m, 25 m, and 50 m. This might prompt us to draw some kind of boundary where a possible relationship between these prehistoric remains stops and starts. On the other hand, the frequent and consistent iconography of feet and boats (Fig. 21.6), and the fact that all these images are shallowly pecked, strengthen the notion of a connection between the creation of the burial monuments and the rock art.

The most spectacular of these cases were discovered at Almvik in Törnshäll parish, Törnshäll 107 (Goldhahn *et al.* 2011): here, no fewer than six burials with associated rock art can be found within sight of each other. Some cup marks from Törnshäll 107 had been detected earlier, just outside a cairn that is 13.4 m in diameter and about 2.4 m high. During our fieldwork in 2009 we also discovered some figurative rock art: feet, trees, boats, and sun symbols (Fig. 21.7). Most intriguing were the feet images, which seem to depict feet of children and young adolescents, apparently a pattern that was repeated throughout the Scandinavian peninsula during the Middle and Late Bronze Age (Goldhahn 2008b, 22). The smallest foot was only 8.6 cm long, probably the foot of someone less than one year old.

As the rock art is placed around a smaller extension of the cairn, a common architectural feature of burial monuments in this part of the world (eg. Baudou 1968; Thedéen 2004; Ragnesten 2005), we suspected that more rock art was to be found under the stones (Fig. 21.7). When a total of 7.7 square metres of the cairn was test-excavated in spring 2010, the result was one of the largest finds of ‘closed’ rock art from northern Europe (Figs 21.8, 21.9). Only the famous rock art from Bredarör on Kivik, the Sagaholm barrow, Mjeltehaugen on Giske in Norway (Goldhahn 2008a), and the already mentioned Lilla Ryafällan in Ör, can be said to be more complex and elaborated.

Our small test excavation also indicated that the cairn’s extension must be considered to be a part of the monument’s architecture. It contained man-made artefacts and showed a clear stratigraphic sequence that must be intentional. The rock art that was discovered beneath the cairn was very similar to what was found outside (Figs 21.7–9). It consists of eight feet images, one U-shaped image and 11 cup marks. We were also captivated by the large



Figure 21.6. Feet, boats and cairn from Måsebo torp, Lofta parish in Tjust, Sweden (photo by Sven-Gunnar Broström)



Figure 21.7. Rock art and cairn at Törnshäll 107, Törnshäll parish in Tjust, Sweden (photo by Joakim Goldhahn)

number of fine lines or strokes that were cut into the panel, all seemingly running towards the centre of the cairn (Fig. 21.9). We have yet to determine what they represent; a possible explanation is that they derive from the work of dragging stones over the panel in order to use them in creating the cairn.

Another important discovery during our limited excavation was the significant difference between the images underneath and outside

Figure 21.8. Cairn and rock art at Törnsfall 107, showing the small test-excavated area (figure by Chris Sevara)



the cairn. First, all the feet images seem to have been made as a composition; they are all aligned and made on the same panel of the bedrock. The feet images beneath the

cairn were again very shallow; some of them were only outlined with scattered pecking that is almost invisible without artificial light. The images from this part of the panel seem to have



been pecked only once, probably in connection with the burial ritual. The parallel with the rock art from Lilla Ryafällan is striking. The rock art outside the cairn, on the other hand, seems to have been “switched on and off” (eg, Wahlgren 2002; 2004) time after time. The images are clearly outlined and visible without artificial lighting.

Our tentative conclusion is that this pattern reveals different stories and biographical sequences of the rituals that were played out in preparations *before* the burial, *during* the burial ceremony, in connection *with the creation of the monument*, and *after* the burial ritual came to an end. All feet depiction on the panel close to the burial monument seems to have been made as a thought out composition. Parts of the rock art were later covered by the cairn, the rest were still exposed to human beings and were altered as the descendants interacted with the deceased person/s in the cairn (Goldhahn *et al.* 2011). Moreover, the result seems to suggest that the distinction between open-air rock art for the living and the ‘closed’ contexts of burial rock art for the dead is an artificial construct and ought to be reconsidered.

We hope to have an opportunity to return to Törnsfall 107 in the near future to challenge and refine our interpretations.

## Conclusion

As all travellers know, good companions enhance and enrich your voyage. Even in this respect, Richard is unsurpassably endowed; his vibrant discussions of archaeological problems and possibilities are interwoven with innumerable and unforgettable anecdotes about past and present colleagues. Anyone who has travelled with Richard also knows that new anecdotes are occasionally born in the wake of his endeavours; it's more or less inevitable. The latter episodes are even more memorable as they were created during the same journeys and occasions that brought back new thoughts and ideas that can be evaluated against older and new source material. This article is just one of innumerable examples.

Inspired by some of Richard's earliest works on North European rock art, this article set out to question some well-known and accepted categorisations of this material, eg, rock art from open-air panels situated in the landscape and from closed burial contexts.



*Figure 21.9. Some of the rock art found underneath the cairn Törnsfall 107 (photo by Joakim Goldhahn)*

The material presented here suggests that the placing of the art inside, outside, or on prehistoric monuments was secondary to its many meanings. We have seen that the same combination of feet and boat images is to be found both inside burial monuments, on them, and just outside them, sometimes on a panel situated only 1 m from the burial, sometimes 5 m or even further away. It therefore seems to be unfruitful to categorise rock art solely according to whether it is placed inside or outside burial monuments. Instead the interpretation of rock art's significance must be based on manifold criteria, such as its iconography, its structure, its relationship to other prehistoric remains, and its setting in the landscape (eg, Bradley 1997a; 1999). As Richard has shown us time and time again, the answers to our inquiries into past and present societies are embedded in the questions we ask – but also in the questions that we fail to raise. To put it simply: the problem with archaeology seems to be, not what we do not know about the elusive and intangible past, but rather what we think we know.

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# The Northernmost Rock-carvings of the Nordic Bronze Age Tradition in Norway: context and landscape

*Flemming Kaul*

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*The rock art of Scandinavia has traditionally been divided into two categories: those of hunters' carvings and farmers' carvings. More recently, a more neutral appellation of Northern and Southern styles has been applied, but these do not account for the real distribution of these styles. Southern styles, including ship images, are found far to the north in Norway, in association with other finds related to the Nordic Bronze Age culture, and in proximity to good agricultural land. Here it is suggested it is time to challenge the 'neutral' classifications and consider whether the terms hunters' carvings and farmers' carvings might still be useful. Ship images in these northern locations could reflect occasional visits of travellers or long distance contacts or expeditions, ultimately stemming from Bohuslän or South-Western Norway. Journeys are postulated to pan-Nordic cult festivals that probably took place at regular intervals in Bohuslän.*

Many scholars, including Richard Bradley, have studied the distribution of the two rock carving traditions of the North. Originally they were named hunters' carvings and farmers' carvings (*veideristninger* and *jordbruksristninger*). The idea of attributing such generalising economic terms to the Nordic rock carving traditions has been seen as unsatisfactory, and today these traditions are usually described in neutral terms such as Northern and Southern styles respectively, or the Stone Age or Arctic tradition and the Bronze Age tradition (Bradley 2006, 165; 2009, 139; Ling 2008, 15 f.; Sognnes 2008, 230). However, even when using the neutral geographical terms, problems arise, since there is a huge overlap zone between

the two traditions. Rock carvings of the Arctic tradition or Northern tradition have been found as far south as the Oslo Fjord; and if including the rock paintings, as far south as on Hisingen at Göteborg, Sweden. Rock carving fields of the Southern tradition have been found as far north as Helgeland in Nordland, Norway. Almost as far north as you can get, at Alta in Finmark, Norway, ships of the Southern tradition have been found. Consequently the neutral geographical terms are somehow misleading – though of course most of the rock carvings belonging to the Southern tradition are actually found in Southern Scandinavia, and *vice versa*.

As we shall see below, the northern-most



rock carvings in Norway belonging to the Southern tradition (in Helgeland, Nordland) occur in areas where other Bronze Age find categories are present, such as burial cairns with bronze grave goods, and votive depositions. Landscape analyses demonstrate that all the find classes – including the rock carvings – are closely related to the best agricultural land of today including barley fields and grass fields for hay harvesting. Perhaps, it is time to challenge the ‘neutral’ classifications and consider whether the terms hunters’ carvings and farmers’ carvings could still be useful.

In 2010 the National Museum of Denmark launched the research initiative *Northern Worlds*. One of the projects has as its main topic the expansion of agrarian economy in the North. The coastal zone facing the Atlantic represents an important part of the research area.

Around 4000 BC Neolithisation took place in Southern Scandinavia. Within a short span of time most parts of Southern Scandinavia were encompassed by the Neolithic Funnel Beaker Culture. In south-western Scandinavia, the Neolithic expansion halted close to what is now the Swedish–Norwegian border at Svinesund. Just north of this border we find the northern-most dolmens and a pottery material clearly related to the Funnel Beaker Culture. But the dolmens are few and small (Østmo 2007; Glørstad 2009). As soon as we move into Swedish Bohuslän south of Svinesund, we find more megalithic tombs including passage graves. For centuries the border-zone at Svinesund remained stable. In most parts of southern, south-western and western Norway there was seemingly only a very limited Neolithic or agricultural impact (Prescott 1996; 2009; Glørstad 2009).

With the transition to the Nordic Late Neolithic (Early Bronze Age), approximately 2350 BC, a new agricultural expansion took place along the Norwegian coast, accompanied by a wide distribution of flint daggers and sickles, some of the flint ultimately coming from flint mines in Northern Jutland (Sarauw 2006, 67 f.). Together with the introduction of agrarian economy a new south-north contact network opened along the western coast of Norway. During the Late Neolithic and the Early Bronze Age the establishment of agro-pastoral systems of production was followed by the full package of cultural elements related to that economy. During the Bronze Age a

border-zone seems to have been established and stabilised in the areas at the Arctic Circle.

## Nordland, Bronze Age context

When studying the expansion of agrarian economy in the North it is of importance to look closely at the northern-most finds related to the Nordic Bronze Age Culture, and to discuss how far to the north the Bronze Age culture complex can be followed.

North Trøndelag – c. 400 km south of the Arctic Circle – is rich in finds of all categories. Here we meet the full agricultural package of the Nordic Bronze Age culture: houses, farmsteads, burial cairns, votive offerings, and iconography on rock carvings and portable objects. North Trøndelag, however – also today a rich agricultural area, dotted with barley fields – was not at the borderline of agriculture.

In the coastal areas of Nordland, close to the Polar Circle, there is good evidence of Bronze Age activity. Even though the cultural remains are relatively few in comparison with Southern Scandinavia, a broad spectrum of find categories are represented, particularly around Sandnessjøen and Alstahaug in Helgeland (c. 50 km south of the Arctic Circle). There are burial cairns with stone cists containing grave furniture of typical Nordic Bronze Age character. Here a bronze razor with a handle in the shape of a horse’s head should be highlighted – found at Skjeggesnes in a stone cist in a cairn together with a bronze pin (Binns 1985, 165–8; Kaul & Rønne 2008, 26). The burial can be dated to period III of the Nordic Bronze Age, 1300–1100 BC. The razor with the handle in the shape of a horse’s head should be regarded as being an emblem of the Nordic Bronze Age Culture known from a large amount of relatively rich grave finds, particularly from Southern Scandinavia. The horse must be considered as a significant iconographical element, and the owner of the razor from Skjeggesnes should be seen as an integrated member of the religious and ideological community of the Bronze Age (Kaul 2004).

The cairn is part of a larger cemetery of cairns, more than 16, most of them situated on a low ridge close to the coast. Even though this cairn is the only one that has been excavated, it is presumed that the others should be dated to the Bronze Age as well. The cairn cemetery in its landscape setting can easily be compared

with similar sites further south. From most of the cairns there is a fine view over the sea, and on to the opposite side the best agricultural land can be seen. The fields are found in a sheltered position between the low ridges dotted with cairns, just south of the mountains known as the *Seven Sisters*. Even though the sea level must have been higher in the Bronze Age, there will still have been room for arable fields here. The farmer of the Skjeggnes farm has kindly informed me that the fields are well suited for growing barley, but grass for hay harvest was preferred. With almost no darkness at night at least two hay harvests can be produced each summer. The hay is used for winter provisions for milk-producing cattle.

Among the votive finds, a bronze sword found in a bog at Våg on the island of Dønna west of Sandnessjøen should be highlighted (Kaul & Rønne 2008, 27). The blade is decorated with ship motifs with stylised animal headed stems of typical Nordic Late Bronze Age style (Kaul 1998, 164). The Våg sword can be dated to period VI of the Nordic Bronze Age, around 600 BC, even though a late period V date should not be excluded. Today the area appears as rich farmland with grass fields for hay harvest, and pastureland for cattle grazing with scattered old deciduous trees.

### ***Nordland rock carvings – Tro and Flatøy***

In the same area in Helgeland, on two small islands south of Alstahaug, Tro and Flatøy we find some of the northern-most rock-carving sites of the Nordic Bronze Age tradition (Sognnes 1985; 1989). On Tro, a rock carving field at Trovika includes more than 17 ships, three horses and a complex spiral pattern. Most of the ships are equipped with highly raised keel extensions fore, and some carry stems in the shape of stylised birds' heads. The shape of the ships indicates a dating to the Late Bronze Age, probably period IV and/or V (1100–700 BC). The ships are typical Bronze Age ships, and they clearly manifest themselves as part of a common Nordic tradition. For instance, similar ships are found in Trøndelag, Norway, and in Bohuslän, Sweden, and they could for that sake have been made on the Baltic island of Bornholm, Denmark, far to the south. A couple of the ships carry rounded in-turned stems indicating an Early Bronze Age date. Also one of the horses – with a long, low neck – could best be determined as belonging to

the Early Bronze Age. Thus, the rock carvings at Trovika should not represent one activity event.

The rock carvings are facing a field of the best agricultural land. The field forms an almost 1 km long, gentle slope facing south, being a well sheltered 'basin' between ridges of higher land. The field ends at a sandy beach with good landing possibilities. Today grass for hay harvest is the main crop giving high yields, but parts of the field are used for cattle pasture.

On Flatøy, separated from Tro by a narrow strait, another rock carving field of evidently Nordic Bronze Age tradition can be observed, with ships, horses and footprints (Sognnes 1985; 1989). When approaching the island of Flatøy by boat, the coastal setting of the rock carving site is indisputable. However, when landed, and walking a few meters up behind the rock carvings, then suddenly an open, agricultural landscape emerges, with pastures, grass fields, and with scattered deciduous trees (Fig. 22.1). In a short moment one might imagine oneself being in Southern Scandinavia, but the snow-covered mountains in the background reveal our position close to the Arctic Circle.

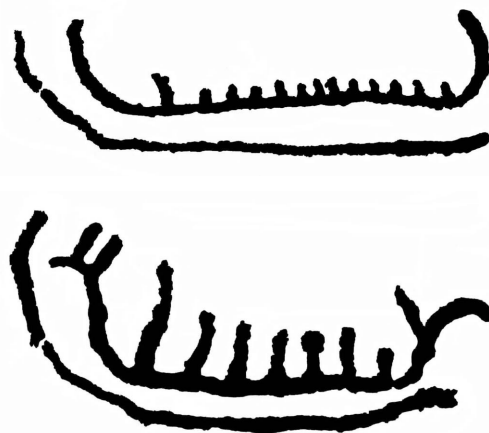
Two of the ships on the rock carvings are equipped with high, in-turned stems. The stem-shape indicates an Early Bronze Age date (the centuries around 1400 BC). This date may seem to be contradicted by the highly raised keel extension at the prow – a feature characteristic of Late Bronze Age ships (Kaul 1998: 87 *ff.*). However, a closer examination of the ships in question demonstrates that the upper part of the keel extension is a later addition (Fig. 22.2a). At a certain point there is almost a break in the line of the keel extension, and above this point the technique of pecking has changed. In other words, an Early Bronze Age ship was reshaped into a Late Bronze Age ship. A ship with stems in the shape of low out-turned horse's heads has likewise got a heightening of the keel extension fore (Fig. 22.2b). Ships with stems carrying these low horse's heads should be dated to period III or IV of the Nordic Bronze Age (1300–900 BC) (Ling 2008, 79 *ff.*), but a dating to period II should not be totally excluded. In any case, also here we are dealing with an 'upgrading' of an older ship image.

Such observations are of importance on different levels. Firstly, we are informed, that there was rock carving activity in both the Early and Late Bronze Age, secondly that this

Figure 22.1: Farming landscape on Flatøy, Nordland (photo: F. Kaul)



Figure 22.2: Two ship images from Flatøy, Nordland: A: with high, in-turned stems. B: with prow decorated with a horse's head. The upper parts of the keel extensions are later additions – from the Early Bronze Age to the Late Bronze Age (photo: Kaul & Milstren)



activity of continuous use – also here, among the northernmost rock carvings of the Bronze Age tradition – was respecting the old rock carvings, renewing the ships, so that they could be in accordance with the latest fashion or tradition. Similar observations of ‘upgrading’ ships and other motifs to the latest standards have been made at a number of other rock carvings in Scandinavia (Fredell 2003, 228; 2010, 62; Kaul 2004, 297–8).

On the rock carving field on Flatøy two horses are depicted. With their long forward-stretched neck, almost straight body, and forelegs turned forward, a dating to the Early Bronze Age, period II or period III is most

likely. A number of parallels to this horse shape have been found in Southern Scandinavia (Kaul 2004, 291 *ff.*). The micro-topography of the rock surface on Flatøy provides an interesting feature. At some rock carving sites it has been observed that depictions of ships cluster in areas covered by running water (Bradley *et al.* 2002, 114; Bradley 2009, 134–8). Sometimes the ships are related to small ‘streams’ coming from higher ground just above the outcrop. This creates a sort of multi-dimensional scenery giving an impression of the ship images actually sailing on a watercourse, particularly visible during and after rainy periods or as the snow melts at the end of winter. These small streams or wet areas may, in some cases, have been a decisive factor for the choice of the rock and the placement of the ships.

On Flatøy there is some slowly running water coming from above. But what is of special significance is that in the middle of the outcrop there is a fissure, where water ‘bubbles up’ from beneath. From this ‘micro-well’ only a couple of centimetres wide, the water slowly runs down the sloping rock towards a couple of the ships partly covered by the water. In a mysterious way, water comes up from below, from the underworld, and the ships in question – not just in a metaphorical sense, but also in a literal sense – could be perceived as sailing on or being in contact with the waters of



the underworld. The left-right-logic of the ship iconography of the bronze objects is not easily applied to the rock carvings (even though a couple of possible examples could be mentioned: Kaul 1998, 265 *ff.*; 2009, 91 *ff.*). That is also the case at Flatøy.

Considering the 'micro-well', one should perhaps have expected that all the ships here are sailing towards the left, being 'underworld ships'. Even though most of the c. 12 ships, where the direction could be determined, are sailing towards the left – among those the three most prominent ships with both keel-line and gunwale-line marked – there are still three ships sailing towards the right. Richard has convincingly argued for a more complex reading or interpretation of decorated stones and rock carvings, where the two sailing directions of the ships meet: up-and-down, left-and-right, and the landscape works together when man has created the great cosmological story on the rocks (Bradley 2009, 154 *ff.*). (Perhaps Richard could make order out of chaos – when considering the lay-out of the ship images on Flatøy.)

### Going further north

When going further north the finds belonging to the Nordic Bronze Age Culture become more and more scattered. However, there are still finds which seem related to landscapes with excellent agricultural potentials.

Around 300 km north of the Arctic Circle, in Northern Nordland, at Bø on the island of Engøya, Steigen, an excavation of a small cairn has revealed a cremation burial with a pair of tweezers and a button with star-shaped pattern, a stylised sun decoration. The grave is from an early part of the Late Bronze Age – period IV – 1100–900 BC. In the same area, at Sandvågmoen, in the middle of some pasture land a large stone has been found covered with cup marks, probably belonging to the Nordic Bronze Age tradition. Here, far up in the North, close to Lofoten, it is still possible to find patches of arable land suitable for hay harvest, and today the Steigen area is a rich milk-producing area. The possibilities for gardening perennials, and the presence of oak and chestnut trees today informs us of a remarkable mild local climate.

In Troms and Finmark, there are still finds belonging to the Nordic Bronze Age Culture,

and it should not be excluded that some of the unexcavated cairns may prove to be of Bronze Age date. At Trondenes at Harstad in Southern Troms two Late Bronze Age neck-collars have been found (Nordic Bronze Age period V, 900–700 BC), and recently a very similar neck-collar has been found together with a celt placed underneath a rock shelter named Hellenen in the same area (Arntzen & Sommerseth 2010, 122–3). Once again, as soon as there are finds related to the Nordic Bronze Age Culture, we find the best possible conditions for agriculture and cattle grazing.

In the same area, on Kveøy, recent excavations have revealed the first farm in Arctic Norway, with houses from the Late Bronze Age and the Pre-Roman Iron Age. The post-holes of the Bronze Age house mark a three-aisled longhouse. Fossil cultivated soils were found that related to the Late Bronze Age activity. Pollen and macrofossil analyses show that barley was cultivated, and that there were pastures with grazing. There were also traces of earlier fossil soils, from the Late Neolithic or Early Bronze Age (Arntzen & Sommerseth 2010; Sjögren 2010). Other pollen analyses from northern Norway seem to indicate the establishment of farming around 2000 BC or during the Early Bronze Age (Johansen 1979; Worren 1979; Binns 1985).

In 1973 the first rock carvings were found at Hjemmeluft/Jiepmaluokta, Alta, Finmark. Since then hundreds of rock carvings have come to light, and this place – almost as far north as you can get – has become one of the most important rock carving sites of northern Europe, and is now recognised as a World Heritage Site. Most of the rock carvings belong to the Arctic tradition (or hunters' carvings).

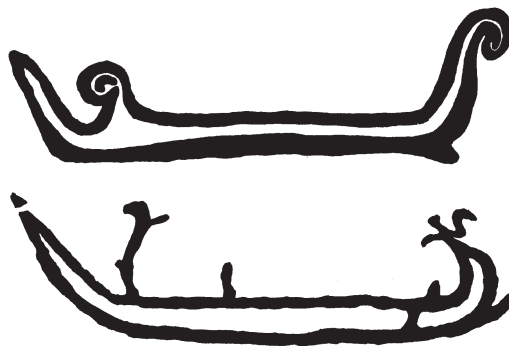
Separated from the other rock carvings, at Apana Gård, on the east side of the Alta Fjord, more than 12 ships distinguish themselves by belonging to the Southern tradition (or farmers' carvings). The remarkable similarities have been noted almost as soon as the ship renderings were discovered, and Helskog (1988, 94) mentions that one of the ships belongs to a type with equals in southernmost Scandinavia. In some cases these ships have been dated to the Late Bronze Age (Helskog 1988, 33; Sveen 1996, 59) in other cases they have been dated to the Pre-Roman Iron Age (through shoreline dating) (Helskog 2000). Most of the ships in question are asymmetrical,



Figure 22.3: Rock carving ship of Nordic Bronze Age tradition, Hjemmeluft, Alta, Finnmark (photo: F. Kaul)



Figure 22.4: Ship images from Gisslegårde and Bottna, Bottna Parish, Bohuslän (redrawn after Fredsjö et al. 1975)



with a highly protruding keel extension fore and a short keel extension aft. In some cases the stems fore and aft terminate in stylised animals' heads, probably horses' heads, ending in short spiral curls. This scheme of ship shape with a high keel extension fore is typical of the Late Bronze Age (Kaul 1998; Ling 2008). At a number of the ships from Hjemmeluft the keel extension and the gunwale extension meet, creating a pointed loop-shaped stem (Fig. 22.3). It has been argued that this loop-shaped stem should be seen as a feature demonstrating a dating to the Pre-Roman Iron Age (Sognnes 2008). That is quite correct as to the symmetrical ships, but when the ships are markedly asymmetrical as in the case of most of the ships from Hjemmeluft, then a dating to the Late Bronze Age period V or period VI (900–500 BC) seems most likely, even though a dating to an early part of the Pre-Roman Iron Age should not be totally excluded.

Ships with 'closed' or loop-shaped stems do not belong to the most common or 'main stream' Bronze Age ship type. But they occur in most of the rock carving regions from Bornholm (Kaul 2005) and Småland (Burenhult 1973, 82–3) in the south to Trøndelag in the north (Sognnes 1999). It is in Bohuslän that we find the best parallels to ships from Hjemmeluft (Fig. 22.4). It is certainly striking to find an almost identical ship image on the rock carving at Bottna, Bottna Parish in Central Bohuslän, around 1500 km from Hjemmeluft as the

crow flies (Fredsjö et al. 1975, 148; Strömberg & Strömberg 1983, 17). If this ship had been standing alone it could be regarded as a sort of coincidence, but in Bottna Parish there is a peculiar concentration of ships showing exactly the same characteristics as to the stem shape and the stylized animal heads, for instance among ships from Bottna and Gisslegårde (Fredsjö et al. 1975, 33–6, 49, 130–3, 137).

Ships that can be compared with the ships at Alta are found on a number of other rock carvings. For instance, the high, almost tower-like stem construction of one of the ships from Hjemmeluft is seen on the rock carvings at Åmøy near Stavanger (Fett & Fett 1941, pl. 11, 14, 20, 22). Here in Rogaland, there is a concentration of ships with closed, loop-shaped stems, not only at the rock carving sites on Åmøy, but also at other sites in the district such as at Harastad, Rudio and Bru I (Høgestøl et al. 2006, 54, 65, 74). Similar ships are known from Utbjøa, Ølen, Hordaland (Mandt Larsen 1972, pl. 26).

Perhaps the implications of these observations of similarity have not yet been fully appreciated. Even though finds from Finnmark related to the Nordic Bronze Age Culture are extremely few, we must still admit that the best parallels are found deep in the south, in Bohuslän and southern parts of western Norway. Furthermore, there are extremely few parallels from Trøndelag closer to Alta, and from Tro and Flatøy there are no such ships. This may have consequences as to our understanding of far distance communication and contacts during the Bronze Age. The ship images from Alta could reflect occasional visits of 'travellers' – long distance contacts or expeditions, ultimately stemming out from Bohuslän or South-Western Norway.

However, we should not rule out the possibilities of a small but stable (Late) Bronze Age farming and pasture population. In that case we might allow ourselves to reverse the communication scenario: it was from Alta that people from time to time went south, paddling for a month or more. The places where the best parallels to the ship images from Alta are found could be the goal of their journey. It was there, they had family connections – it was there, they carved their specific ship-images together with their family-members. Another reason for such a long journey could be the wish to join the Pan-Nordic cult festivals that

(probably) took place at regular intervals in Bohuslän (particularly in Period V, when we see a peak of rock carving activity here). Bohuslän may have functioned as a central 'holy place' or place of pilgrimage for the surrounding regions, if not for the whole of Scandinavia (Kaul 2004, 103). By such cult festivals, where people from all over Scandinavia – even the most distant parts – met, a common ideology and religion related to farming was upheld. We need to consider such scenarios seriously as possibilities if we want to explain the evidence of Nordic Bronze Age rock carvings (farmers' carvings) demonstrating a common iconography covering huge areas (Kaul 1998, 274; 2004, 409).

Today, at some places at the Alta Fjord, a particularly mild climate enables barley to ripen in good summers. Probably climate conditions for cereal cultivation were even better in the Bronze Age. Also potatoes, turnips, and carrots are now grown. In sheltered inland areas a few kilometres from Hjæmmeluft, farms with byres for cattle can be seen today, surrounded by large grass fields. It is possible to speak of arctic agriculture, almost as far north as you can get, hundreds of miles north of the Arctic Circle, at 70° north.

All the way from Trøndelag and Helgeland, along the coast as far north as Alta in Finmark, we find evidence of the Nordic Bronze Age Culture, and in each case the sites are situated where there are patches of land suitable for agriculture. Today these places favoured by a mild local climate yield possibilities for farming, cattle breeding, and milk production. We may envisage these patches – where agriculture was carried out at the border – as small islands of arable land surrounded by mountains and the sea (many of the sites are actually on islands), where the only possible vehicle of transport and contacts was the ship.

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# Ships, Rock Shelters and Transcosmological Travel in Scandinavia and Southern Africa

*J.D. Lewis-Williams*

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*Richard Bradley has always had the capacity to develop ideas that resonate with parts of the world far removed in space and culture from the western European contexts with which he chiefly deals. Here, parallels between his work on rock art in Scandinavia and that of the author's on southern African San rock art are considered. It is shown that in both regions people believed in a three-tiered cosmos that provided a framework for belief and ritual, and that the rock art in each was concerned with transcosmological travel. The images should not be viewed as single compositions, but rather as relating to unfolding spiritual journeys. In both Scandinavia and southern Africa images suggest that the rock face was permeable and that another realm lay behind it.*

In his diverse research Richard Bradley consistently balances empirical evidence with subtle interpretation. He never allows 'theory' to overwhelm or bypass evidence, nor does he plunge into impenetrable post-modern discourse that obscures rather than clarifies. Nowhere in his writing do we find sentences stuffed with obligatory buzzwords that bestow philosophical profundity on trivia. Perhaps his early legal training contributed to the precision and clarity of his writing. Indeed, his lucid expositions are a model that we should all do well to emulate. But a lucid style is not his only merit. In all his publications he comes up with ideas that resonate with those of us who work in parts of the world far removed in space and culture from the west European contexts with which he chiefly deals. In this tribute to his

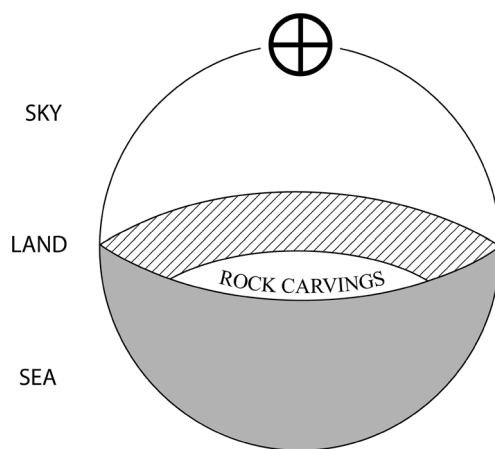
many seminal publications I consider parallels between his work in Scandinavia and that of my own and others in southern Africa. Parallels between spaces and images in Bronze Age Scandinavia and Later Stone Age southern Africa concern transcosmological travel. People in both regions believed in a three-tiered cosmos that provided a framework for belief and ritual.

## **Scandinavian ship settings**

Amongst the topics that Bradley has discussed are the ship settings of Scandinavia (Bradley 2008; 2009; Bradley & Widholm 2007a; 2007b; Bradley *et al.* 2010; Ballard *et al.* 2003; on later Viking ship burials see Price 2002; 2008). Dating principally to the Bronze Age,



Figure 23.1: The three tiers of Bronze Age cosmology (after Bradley 2006)



these monuments were constructed by setting upright stones to form the shape of ships, each with a stern and bow and sometimes an internal structure. They are approximately the size of real ships. In addition, two-dimensional images of ships, as viewed from the side, were carved on rocks and engraved on metalwork. In interpreting all this maritime evidence, Bradley writes of the probable Bronze Age belief that a mystical ship transported the sun across the firmament and through the sea below the land. As it passed through the air, this ship was believed to be accompanied by a horse, while underwater it was accompanied by a fish or a snake. In sum, Bradley argues that '[t]he passage of the sun provides the most powerful symbol in the beliefs of Bronze Age Scandinavia' (Bradley 2006; 2009, 186; Bradley *et al.* 2010, 91–2).

Other significances were nested within the parameters of this overarching belief. The makers of the ship settings and rock carvings believed in a three-tiered cosmos: the sky above, the sea beneath and the land between them (Fig. 23.1; Bradley 2006, fig. 11; see also Bradley 2009, fig. 64). The shore line was thus a key liminal area along which, or close to which, the ship settings were built. It has also been argued that movement is suggested by the direction in which the ships face. Left-sailing ships are believed to be night-ships travelling through the underworld; right-sailing ships are of the heavens. Directionality across the surface on which rock carvings were executed was thus implied (Kaul 2005, 136). Furthermore, the images at some sites suggest that the ships are disappearing into the rock (Bradley 2006, 378–9; Ling 2008).

The significance of the sea and liminality is also seen in the funerary practice of transporting the dead across the water to an island by means of ships without sails, paddles, or oars (Bradley 2009, 142; Zvelebil & Jordan 1999). People abandoned navigation of these 'ships of the dead' and left them to drift according to the will of the gods and the currents. In more recent times, the Anglo-Saxon poem *Beowulf* contains this notion in some evocative lines:

They ... let him drift  
to wind and tide, bewailing him  
and mourning their loss. No man can tell,  
no wise man in hall or weathered veteran  
knows for certain who salvaged that load.  
*Beowulf* (Heaney [transl.] 1999, 4)

Not surprisingly, evidence for cremation of the dead is associated with Scandinavian rock carvings and navicular stone monuments. Some graves were constructed in the shape of a ship, and ship settings are often associated with burial grounds (Bradley 2009, 146, 183; Bradley *et al.* 2010, 92–4). Both the dead and the sun were thus believed to follow an eternal transcological route by means of a ship. As numerous writers in addition to Bradley have recognised, ships were clearly more than simple utilitarian artefacts that people chose to depict or to replicate with stones (eg, Ling 2008).

Reaching farther afield, Bradley and his colleagues have drawn parallels between Scandinavia and south-east Asia and Micronesia. There, in addition to being essential for long-distance trade, researchers have seen in the ship a metaphor for a means of passing between the realms of the living and the dead and therefore an appropriate context for burials (Bradley 2009, 130; Ballard *et al.* 2003; Malinowski 1922). Bradley attributes the striking resemblance between beliefs in these two widely separated areas to the special significance that travel by water can acquire. Not only does aquatic travel provide access to exotic goods and thereby social prestige and power; it also opens up access to unfamiliar beliefs that may add to or challenge people's understanding of the world in which they live.

In whatever ways Scandinavian stone ship settings may have been used, it seems likely that rituals now largely lost were preformed within their confines. The settings were 'containers', meaningfully demarcated spaces that gave overall significance to what happened within them. Whatever precise form those

rituals took, they almost certainly related to transcossmological travel, whether of the sun or the dead or both.

## Southern Africa

While Bradley was working with the Bronze Age evidence, research in southern Africa was independently following comparable paths. The hunter-gatherer Later Stone Age San rock art of southern Africa took two forms: rock engravings (petroglyphs) and rock paintings (pictographs). On the interior plateau of the sub-continent, engravings are found in the open air on hilltops, low rises, or river beds. Rock paintings, on the other hand, are found in the abundant rock shelters of the mountainous escarpment and adjacent areas. Some rock paintings, though not as diverse and as finely executed as those along the escarpment, also occur in the much less common rock shelters of the interior plateau. Here, I am concerned with the San rock paintings of the escarpment and ways in which they parallel Scandinavian ship settings and rock carvings. Even as beliefs about ships were common to both Scandinavia and south-east Asia, so too there were concepts common to Scandinavia and southern Africa.

Unlike the European Bronze Age art and ship settings for which there is no contemporary ethnographic record, southern African San art can be studied with the aid of multi-component ethnography. At once southern African researchers are on firmer ground than those who work with the European Bronze Age imagery. We should, however, never consider San ethnography a simple one-to-one explanation of the art. Indigenous people express their beliefs in their own terms and concepts, not in anthropological language. Researchers must explicate the ethnography as much as they need to interpret the painted images.

Some of the southern African ethnography was recorded in the second half of the 19th century when the San were making their final images (Lewis-Williams & Pearce 2004a; Lewis-Williams & Challis 2011). Principally, it comprises approximately 12,000 pages of manuscript transcriptions in phonetic script of the /Xam San language (there were, and still are, many San languages), along with parallel English transliterations (Lewis-Williams 2000;

Hollmann 2004; Skotnes 2007). The indigenous /Xam people came from the semi-arid central parts of the interior plateau. In addition, there are more limited, though enormously valuable, 19th century sources that do not have a phonetic component (eg, Orpen 1874). Some of this 19th century material pertains directly to rock art (Lewis-Williams & Challis 2011); the rest provides evidence for the cosmological, conceptual, and mythological context within which the art was made (Lewis-Williams 2010). Over and above these early primary sources, there is the more widely known ethnography that was compiled largely in the second half of the 20th century: it derives from a number of linguistically distinct San groups that live in the Kalahari Desert of Namibia and Botswana. At first, researchers thought that this source was geographically and temporally too remote to be of use in understanding the southern rock art (eg, Lewis-Williams 1972). Later, empirical work established important parallels between the two sources. These commonalities include rituals performed during the hunting and killing of eland and hartebeest antelope, as well as girls' puberty rituals and the religious complex of belief and ritual that has been termed shamanistic (Lewis-Williams 1981; 1992; Lewis-Williams & Biesele 1978; Lewis-Williams & Pearce 2004a). It is in components of San shamanism that we detect parallels between South African Later Stone Age practices and those of Bronze Age Europe.

### *San shamanism and imagery*

Like the Bronze Age people about whom Bradley has written, the San believed (and,

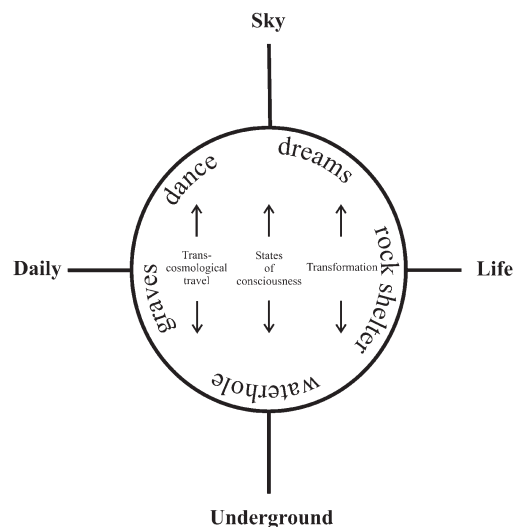


Figure 23.2: Southern African San cosmology and interaction (after Lewis-Williams & Pearce 2004a, fig. 3.7)

in the Kalahari, still believe) in a three-tiered cosmos: above was the spirit realm of the sky where god lived, and below the ground on which they lived their daily lives was another spirit realm (Fig. 23.2; Lewis-Williams & Pearce 2004a, 52–5). Shamans were believed to journey below ground, sometimes via an underground river, and then to continue on up into the sky (Bieseke 1993, 70–3).

As we have seen, Bradley postulates a similar three-tiered cosmos (Bradley 2009, figs 63, 64, 69; after Kaul 1998; 2005). A possible explanation for the origin of this widely held tripartite cosmology derives from the functioning of the human nervous system (Lewis-Williams 2002a, 111–35; Lewis-Williams & Pearce 2005, 37–59, 78–101). In certain altered states, human neurology creates, on the one hand, sensations of floating and looking down on the world and, on the other, of passage through a vortex or tunnel. People in various cultures interpret these universal sensations as journeys to other worlds that they come to believe exist above and below the surface of the earth and that are inhabited by beings and powers that take an interest in terrestrial affairs.

Researchers have shown that certain San images derived directly or indirectly from this tripartite cosmology and its related shamanistic beliefs, practices, and experiences that are recorded in both the 19th and 20th century ethnography (Lewis-Williams & Pearce 2004a; Lewis-Williams & Challis 2011). Indeed, one of the questions that have engaged researchers is how much of the imagery relates to San shamanism and how much is better understood in terms of mythology or other concerns (Lewis-Williams 1998). At first, I thought that the imagery was associated with a number of rituals: girls' puberty rites, boys' first kill observances, marriage, and the curing trance dance and other curing contexts (Lewis-Williams 1981). But as my familiarity with the images in a great many sites increased, I found that few (if any) images could be related to the rites I have mentioned, whereas most were clearly associated with or actually depicted the San's shamanistic trance dance and entry into the spirit world (Lewis-Williams 1998). This specific focus of the art is suggested by a variety of painted features. In addition to paintings that clearly depict trance dances, these sometimes isolated features include

characteristic dancing postures, nasal bleeding, clapping women, and accoutrements of the dance that include dancing rattles and flywhisks (the San restrict the use of flywhisks to the trance dance). Further, some painted features show things that could have been seen only by people in trance: they include the expulsion of sickness from the back of the neck, flecks of potency scattered among dancers, so-called 'threads of light' and transformations that include people with antelope heads and hoofs. The art thus provides a privileged view, showing us what ordinary people could not see.

The assertion that images without any of these characteristics (e.g., solitary, realistically painted antelope) merely depict daily sights and events that were painted for the delectation of the painter and his band is a fall-back position: it is a covert analogy with Western imagery that is often made for purely secular reasons. Indeed, the false assumption that the art was narrative in a purely literal sense was one of the earliest explanations that researchers devised but later rejected. Even hunting scenes, frequently said to be a staple of San art, were seldom painted: for instance, Harald Pager (1971, 335–6), working with 3909 individual images in the Didima Gorge (part of the Drakensberg escarpment formerly known as 'Ndedema') found only 29 possible hunt scenes; of these, only seven seem to show people shooting at game. On the other hand, there is evidence that depictions of certain antelope, such as eland, were made to be 'reservoirs' of supernatural potency. This potency, derived from an eland's blood that was sometimes mixed into the paint, could then be drawn on when dancing shamans (and perhaps other people as well) desired more power (Lewis-Williams & Pearce 2004a, 100–6).

This is not to say that hunting was unimportant to the painters. On the contrary, the /Xam San recognised a category of shamans that they called *opwaiten-ka lgi:ten*, literally, shamans of the game (Lewis-Williams 1981, 76–7; Lewis-Williams & Pearce 2004a, 103–104). In one context, some of these people were believed to don a special kind of cap with antelope ears and thereby to lead antelope into the waiting hunters' ambush. Supernatural animal control of this kind is depicted in the art, but it escapes the attention of modern Western viewers who are not familiar with San beliefs and practices. When hunting is depicted, it is part of shamanistic activity.

***San rock shelters and images***

San painted rock shelters vary greatly in size. Some are large enough to accommodate a modern Western double-storey house, while others are so small that only a couple of people could have sheltered in them. A few have no floor at all: they could not have been inhabited (Lewis-Williams & Pearce 2004b). These sites suggest that there was more to San rock art than mere domestic decoration.

Within rock shelters, paintings were placed in a variety of ways. In some instances, the entire length of a site has a scatter of images. In others, the images are clustered in densely painted panels with stretches of unpainted rock between them. Large fallen rocks within shelters are also often painted. The number of images within sites varies. Some sites have only one or two images, while others have a couple of hundred. In explaining this diversity, we must remember that shelters were painted over long periods: as a result, images were often superimposed on one another, not randomly but in accordance with a discernible syntax (Lewis-Williams 1974; Lewis-Williams 2002b). As the painters worked, they did not have a preconceived, finished concept in mind which they aimed to construct. In this respect, painted San rock shelters are like accumulations of Western graffiti: image-makers developed, commented on, and innovatively added to the images they found in a shelter. We must also remember that the San communities that made the paintings came to a tragic end in the second half of the 19th century. The practice of painting ended as San society disintegrated and the people were, in many cases, persecuted and murdered. All the painted shelters as we see them today were probably 'work in progress'.

I illustrate some of these points by turning to a densely painted site in what is now the Eastern Cape Province of South Africa (Lewis-Williams & Pearce 2009). It is a comparatively small, north-facing rock shelter approximately 21 m long and 2.2 m high. It is about 5 m above the bank of a perennial stream. Under normal conditions the floor is dry, and it can accommodate about half a dozen sleeping people. Its entire length is painted. As is often the case, some paintings are well preserved, but others are today very faint. Clearly, the expanse of images was painted over a long period and more than one painter contributed to it.

The paintings are of various kinds. Of the 211 images in the site, 66 are of eland. By contrast there are only 16 images of rhebuck, a much smaller antelope. The eland was the San's most significant animal. It featured in all three of the rites of passage that I have mentioned, but, as far as the art is concerned, its greatest significance lay in the San belief that it possessed more supernatural potency than any other creature. It was this potency that San shamans harnessed to enter trance, that is, the spirit realm. Though dreams and solitary experiences also played an important role, this state was achieved principally in a healing dance (also known as the 'trance dance'): the clapping of complex rhythms by the usually seated women and the sustained rhythmic dance steps of the men induced an altered state of consciousness. In the present-day Kalahari this state is induced without recourse to hallucinogens (Biesele 1993; Marshall 1999).

Further, the dance is still performed in the centre of the camp: there is nothing secret about the activity. The men dance in a circle around the seated women thus creating a circular rut in the sand. Everyone watches or participates as the shamans (about half of the men and a third of the women in a camp) enter trance. In that state they cure the sick by drawing sickness out of people's bodies and into their own. They then expel it through a 'hole' in the back of the neck; it is believed to return to the spirit realm and the malevolent spirits of the dead who sent it in the first place (Marshall 1999). Another important component of trance experience (and of dreams as well) is out-of-body travel (Biesele 1993; Katz *et al.* 1997). Shamans are believed to leave their bodies and travel to distant parts of the desert to see how their friends and relatives are faring and also to visit god in the spirit realm to plead for the sick.

This multi-component shamanistic practice was conducted in the rock shelters of the escarpment and its surrounds, or at least in those shelters that are large enough (there are virtually no rock shelters in the Kalahari Desert). In the 19th century George William Stow, a geologist, found evidence for this activity in rock shelters:

The universality of this custom was shown by the fact that, in the early days, in the centre of every village or kraal, or near every rock-shelter, and in



Figure 23.3: Tracing of a portion of the painted panel in RSA FET3. Eland are associated with a 'thread of light'. Another line, but without fringing dots, leaves a step in the rock above the superimposed eland on the right. A human figure and an eland both have nasal blood; the 'thread of light' also appears to bleed. A natural calcite run has painted eyes, ears and a zigzag red nasal blood line added to it (after Lewis-Williams & Pearce 2009, fig. 3)



every great cave, there was a large circular ring where either the ground or grass was beaten flat and bare, from the frequent and constant repetition of their terpsichorean exercises.' (Stow 1905, 111)

The rock shelters thus became painted portals to the spirit realm. They encapsulated the images and the activities that went with them, as the Scandinavian ship settings probably provided demarcated spaces for the performance of rituals.

A feature of the specific site I am discussing is that, although it is painted from end to end, only a part of the rock face can be seen at one time. The narrowness of the shelter means that one cannot stand far enough back to see the whole sweep of images. This restriction raises questions as to how the San themselves viewed the panel. Did they see it as a medley of disparate images, each to be considered individually, or did they accept that a viewer should move along the length of the shelter, rather as one to today views the Bayeux tapestry? A painted feature holds the key to this question.

It is a painted red line usually fringed with

white dots, though other forms are known (Fig. 23.3; Lewis-Williams & Pearce 2004a, 179–81, *passim*; Lewis-Williams & Challis 2011, 76–82, *passim*). Shamans say that they either climb these 'threads of light' as if they were ropes, or they walk along them as if they were paths (Lewis-Williams *et al.* 2000). Some say that they float just above and glide along the 'threads'. In the paintings, 'threads of light' are shown being held by people and being walked along. They also enter and leave images of antelope and people. Where they stretch from a human image to an antelope they depict the belief that a 'thread of light' linked a hunter to an animal and drew the animal to him (Keeney 2003, 104–5, 109, 127). Importantly, these painted 'threads' enter and leave the rock face through cracks or steps or by simply ending and then starting up again a short distance away. The rock face was a 'veil' suspended between this world and the spirit world that lies behind it (Lewis-Williams & Dowson 1990).

Painted rock shelters thus became contexts for transcosmological travel. In viewing the

images in a shelter, a San person could move along the line from image to image and also, at least in imagination, in and out of the rock face. The images were thus not viewed as a single 'composition', but rather as an unfolding spiritual journey. Viewers, shamans or ordinary people, could participate in the images, not merely look at them: they could be caught up in the drama of transcosmological travel. Entering the confines of a rock shelter was entering a ritual space that linked realms. Within that space, the images took people farther into the spirit realm behind the rock face. That people also lived in rock shelters did not trouble the San: they do not observe a distinction between sacred and secular spaces. As I have pointed out, in the Kalahari today the dance is performed in the living area of the camp.

Finally, we need to note an important corollary, one that leads us back to the Scandinavian ship settings. The San rock shelters were also places of burial. It seems that only certain people were buried in rock shelters: some shelters have many burials, some none. In the rock shelters along the southern coast of southern Africa painted stones were sometimes part of the grave furniture (Pearce 2008; Lewis-Williams & Pearce 2004a, 39–69). The images on these stones do not differ from those painted on the walls of rock shelters. Some depict people in dancing postures. Images in both contexts were mediators between the world of daily life and the spirit realms of the San cosmos. San dead were believed to undertake subterranean journeys that in some ways replicated the journeys that living shamans undertook. A 19th century San man spoke of 'a Bushman path' (probably a 'thread of light') that lead to a hole in the ground: at death, people followed this path to the spirit realm (Lewis-Williams & Challis 2011, 79).

## Scandinavia and southern Africa

There are thus parallels between the ship settings that Bradley discusses and the rock shelters in which the southern African San painted. Both were spaces demarcated, one by people and the other by nature, for the performance of rituals. Those rituals were, in both cases, concerned with transcosmological journeys. The parallels that Bradley detects between the

Scandinavian ship settings and the significance of ships in south-east Asia and Micronesia have counterparts: although there are no ships in the southern African archaeological record, there are images and demarcated spaces that facilitated transcosmological journeys. The rock shelter with its art and burials became a liminal area and the rock wall itself an interface between realms. In both Scandinavia and southern Africa images suggest that the rock face was permeable and that another realm lay behind it.

As for the images themselves, we have seen that, in the Scandinavian rock carvings, directionality and movement were probably implied by the way images of ships point. Be that as it may, the images were not depictions of static ships. Indeed, transcosmological movement was an integral component of their meaning. Similarly, in southern Africa the red line with white dots implies movement. San shamans still believe they move along 'threads of light', and in the art people could follow the trajectory implied by the 'threads' from image to image as well as in and out of the rock face.

In both regions, the rock art images, and in Scandinavia ship settings as well, were not dead representations of beliefs but rather indicators and, importantly, facilitators of religious experiences that transported people and the dead through the cosmos. The panels of images were 'alive' with movement.

## Acknowledgements

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## Images in their Time: new insights into the Galician petroglyphs

*Ramón Fábregas Valcarce and Carlos Rodríguez-Rellán*

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*Richard Bradley's research on Iberian open-air rock art has proved essential in understanding its relationship with prehistoric landscapes. However, there remain a number of constraints and issues surrounding the interpretation of open-air rock art which are considered here. A consensus about the chronology of this phenomenon (which places it in the local Bronze Age) has been challenged, with some researchers claiming an Iron Age date for many petroglyphs. This is subject to critical scrutiny and here rejected. Matters are not helped by the absence of a comprehensive catalogue of the open-air rock art, and the fact that most sites have never been studied in depth. An opportunity is also taken to review the interpretation of Galician rock art as an open or hardly-restricted phenomenon, drawing attention to physical constraints that existed on its observation. Another controversial issue among specialists has been the precise relationship between Galician rock art and the domestic sphere, leading to a presentation of dichotomous 'sacred' versus 'domestic' areas. While contemporary settlements might be difficult to detect, this dichotomous image is shown to be erroneous, with human activity being demonstrated in the surroundings of many petroglyphs.*

kann dich tausendmal rufen, du stehst nur da, ich  
erreich dich nie  
Ulla Meinecke, *Zauberformel*

### **An outline of the issue**

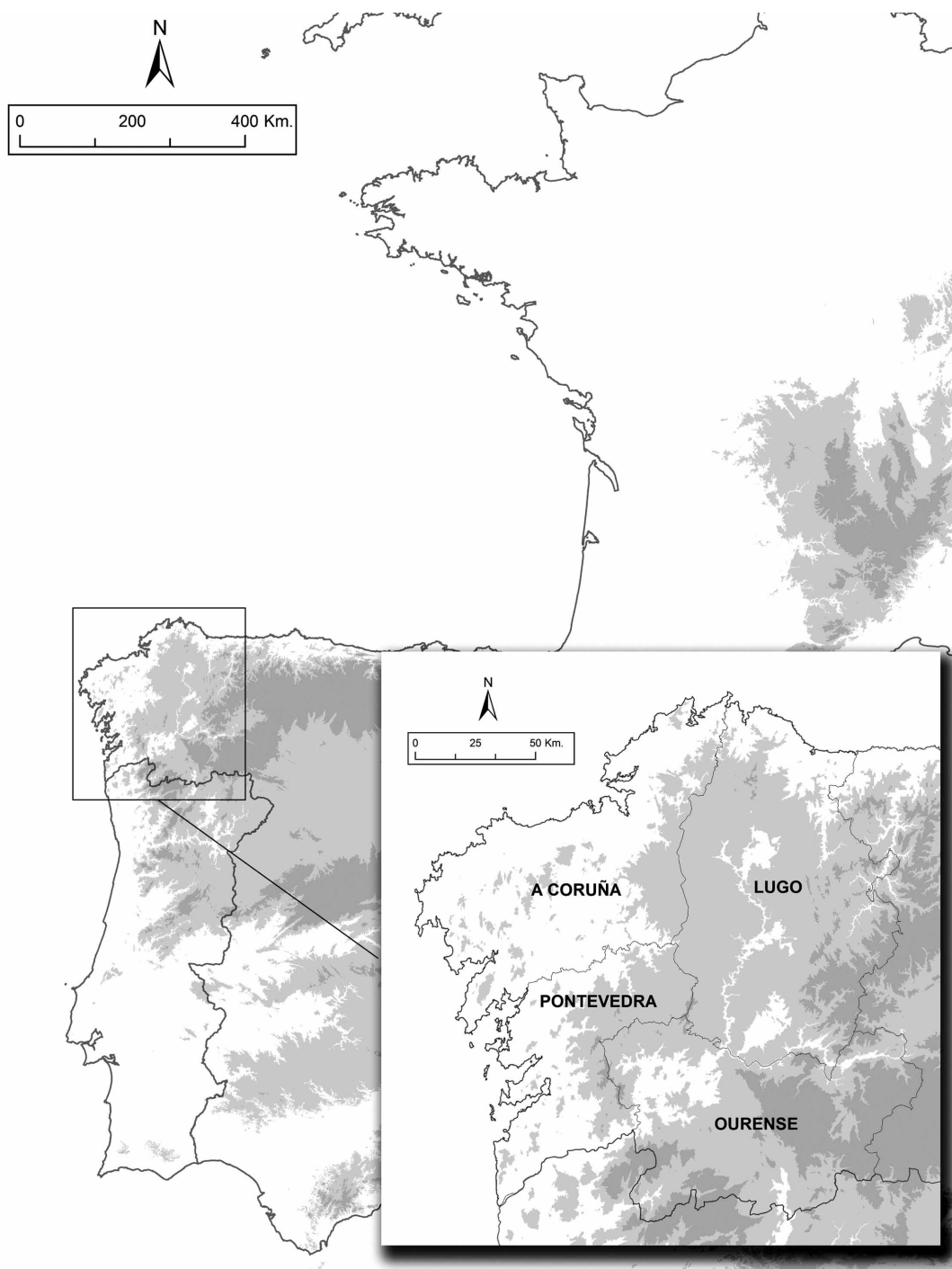
The role played by the work of Richard Bradley in North-west Iberia is essential for understanding the present level of knowledge about the open-air rock art phenomenon in this region; such research, embodied in many publications (Bradley 1997; Bradley & Fábregas 1999; Bradley *et al.* 1995, among others), has

profoundly influenced the investigations conducted in this area ever since, in particular those approaching the relationship of rock art with the landscape and surrounding territories. However, after two decades since Bradley's first trip to Galicia, there are still a number of constraints affecting our appraisal of the open-air rock art, hinting at some of the present knowledge having feet of clay.

Over 2000 sites are known in the four provinces of Galicia and Northern Portugal (Fig. 24.1), but, in spite of the huge bibliography

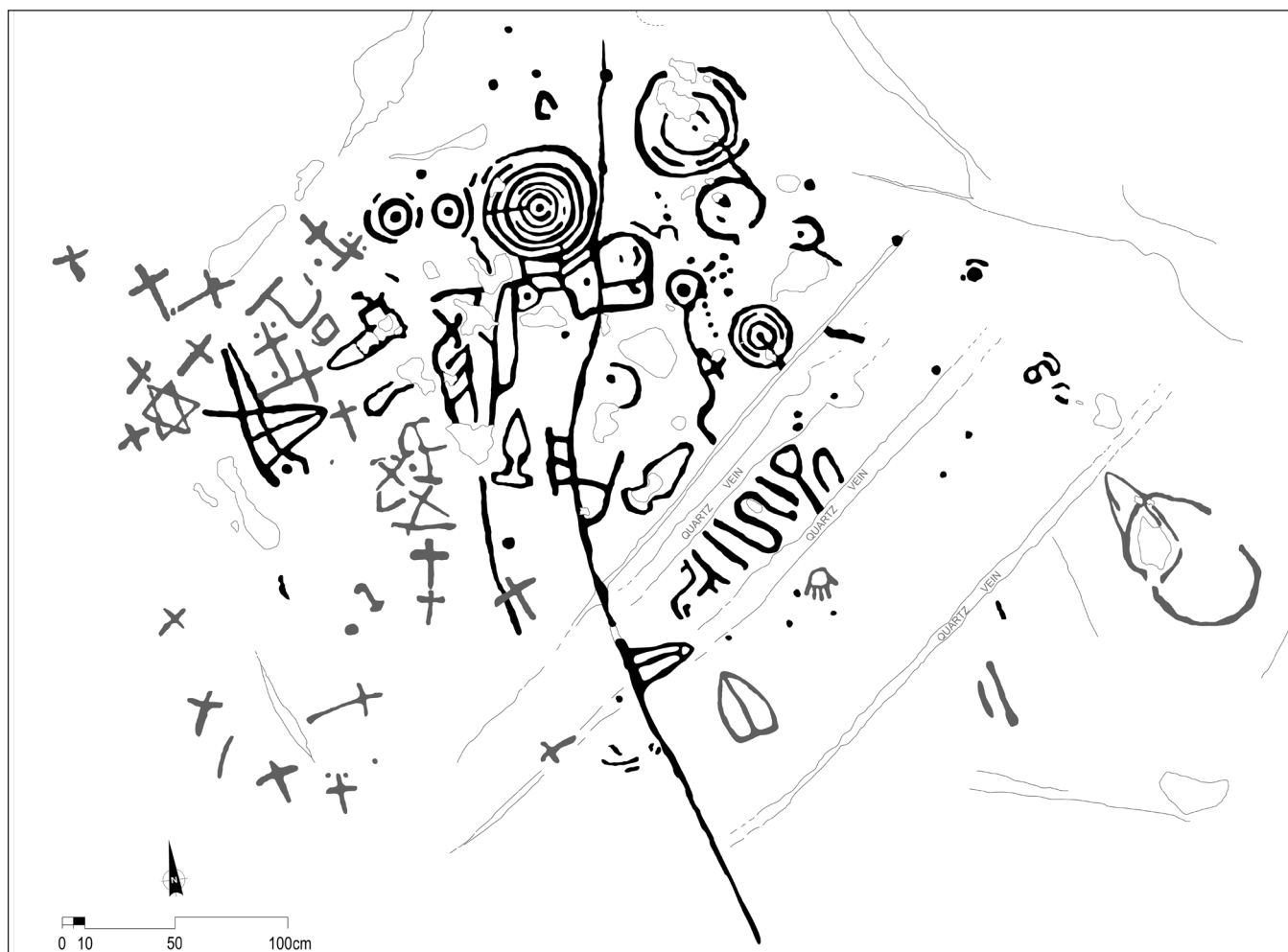


Figure 24.1: Map of sites that are discussed



generated, no comprehensive catalogue of the open-air rock art is available as yet. We must conform ourselves with partial syntheses for certain areas in order to assess the contents of this archaeological assemblage: a first attempt at systematic cataloguing is that of García & Peña (1980) who recorded over 500 rocks from the Pontevedra province (the richest area of all); Vázquez (2006) made a statistical study of

about 1006 rocks from all around Galicia, based on published references up to 1991. Along with this, we have other analysis undertaken by us in two areas: Northern Barbanza Peninsula (south-west coast of A Coruña) and the Deza district (interior of the province of Pontevedra), based on a list of, respectively, 164 and 92 rocks (Table 24.1). The results suggest two basic things: most Galician petroglyphs display geometric images



*Figure 24.2: Foxa da Vella (Rianxo, A Coruña) as recorded by the authors (modern motifs in light gray)*

composed of cup-marks and an assorted array of circular motifs, while – except in the North Barbanza – the naturalistic group, made up fundamentally of deer and daggers/halberds is far less represented. The geometric group (those closer to their Atlantic counterparts) are more widespread, reaching well into inland Galicia, while the other is concentrated in the coastal areas, only the weapons occurring occasionally in more interior locations, as in the Deza region.

In addition, most sites have never been studied in depth, so we are not sure about the precise number and nature of the motifs present on the panels, whose observation is usually difficult because of their heavy weathering. Even some of the better known petroglyphs are not well recorded: the systematic use of artificial lights has shown that in 70% of the cases previous studies had ignored a significant part of the existing engravings. A

good example of this may be the petroglyph of Foxa da Vella (Rianxo, A Coruña), much referenced in the literature (Fig. 24.2), in which we discovered daggers, zoomorphs, serpentiforms and circular combinations that had gone unnoticed in previous analyses. Such a state of affairs led us to approach with great caution some chronological proposals for Galician rock art based on alleged frequencies of association between motifs (Santos 2008; Fábregas *et al.* 2009).

In 1991, by the time of Bradley's first involvement with Galician open-air rock art, there was an apparent consensus about the chronology of this phenomenon, roughly spanning the local Bronze Age. Only a little after, Peña and Rey (1993) put forward a new proposal relating the petroglyphs to the 3rd–2nd millennium BC transition, a timespan slightly widened in a later work (2001). Generally accepted by most specialists, it has

Table 24.1: Presence (%) on the rocks of some prehistoric motifs

	García & Peña (1980)	Vázquez Rozas (2006)	North Barbanza Peninsula	Deza region
Cup-marks	89.56	62.12	52.40	72.83
Circular combinations	75.57	78.62	37.20	41.03
Zoomorphs	19.84	12.82	36.00	–
Weapons	3.81	3.37	2.47	5.43
Labyrinths	0.76	1.98	0.62	–
Total rocks	>500	>1062	164	92

been challenged by certain authors (Santos 2008; Santos & Seoane 2010) contemplating the making of a significant number of images up to the local Iron Age. Therefore, in spite of advancement in knowledge about the Copper Age and Bronze Age periods in north-west Iberia, the dating of the open-air rock art remains a bone of contention, among other reasons due to the intrinsic difficulty of obtaining absolute dates from carvings executed on exposed granitic surfaces where superimpositions are scarce and difficult to assess.

#### *A view from within*

One of the main features of Galician rock art is its great variability, increasing along with the growth in the number of petroglyphs. Thus, in the last decade we observe the discovery of art sites of a distinct nature and also new types of images that are incorporated into the iconographic corpus with the result that, quite often, earlier assumptions must now be duly qualified. With respect to the dating of this phenomenon, despite the difficulties already mentioned, we feel that there are several threads of evidence that we can follow with an aim to at least overcome partially this daunting obstacle on the way to understanding the wider context of Galician petroglyphs.

The cup-marks and circles, being the most common representations, are quite difficult to date, for the simplicity of the first leads to a well attested resilience, being often associated with Neolithic mounds, but also lasting into historic times. The curvilinear motifs are not easy to date either for, in sharp contrast with Irish cases, they are seldom carved on Galician megalithic slabs and only a few portable objects, such as the Rechaba discs display curvilinear designs (Fábregas 1992; Fig. 24.3). It seems reasonable though, taking into account this scanty evidence together with that of similar carvings in the British Isles and Ireland (Bradley 2007, 97; 2009, 114–9), that

the circles could go back to the later 4th/early 3rd millennium BC, while, almost certainly, persisting until the 3rd/2nd millennia BC transition.

The Neolithic anchoring for the circular themes is shared by other, less common, motifs such as the boxed U's from Pozo Ventura (Poio, Pontevedra) or the single circles within an oval enclosure found there and at Coto da Braña 3 (Cotobade, Pontevedra) which resemble megalithic examples, not just in a formal sense, but also in the way they structure themselves on the panels (Sartal 1999; Costas & Pereira 2006; Alves 2008) (Fig. 24.4).

But within the mainstream of Galician petroglyphs, the representations of weapons (halberds and daggers) constitute the most valuable chronological yardstick, since these may be indirectly dated by comparison with their metallic counterparts. In the case of the halberds, though the examples found in north-west Iberia lack a clear context, their British prototypes have a chronology of *c.* 2200–2050 BC, while in the Argar culture their presence in the funerary record goes between 2000 and 1800 BC (Fábregas *et al.* 2009). Daggers have not such a clear-cut timespan, their typology being more difficult to assess on the carvings, yet they seemingly reproduce items ranging from the Bell Beaker times to the local early Bronze Age and are at least partly contemporary with halberds (Peña 2003).

The north-west Iberian rock art, being located outdoors, has usually been considered as a phenomenon whose contemplation would be little restricted, in contrast, for example, with megalithic art. Therefore, petroglyphs were traditionally regarded as easily to perceive and, therefore, virtually accessible to anyone going about the prehistoric landscape. This concept is related to the notion of the open-air rock art as, basically, a method of regulation of the space devised by early farmer groups still with a high degree of mobility that would not be often in direct contact (Bradley 1997); an 'intergroup'

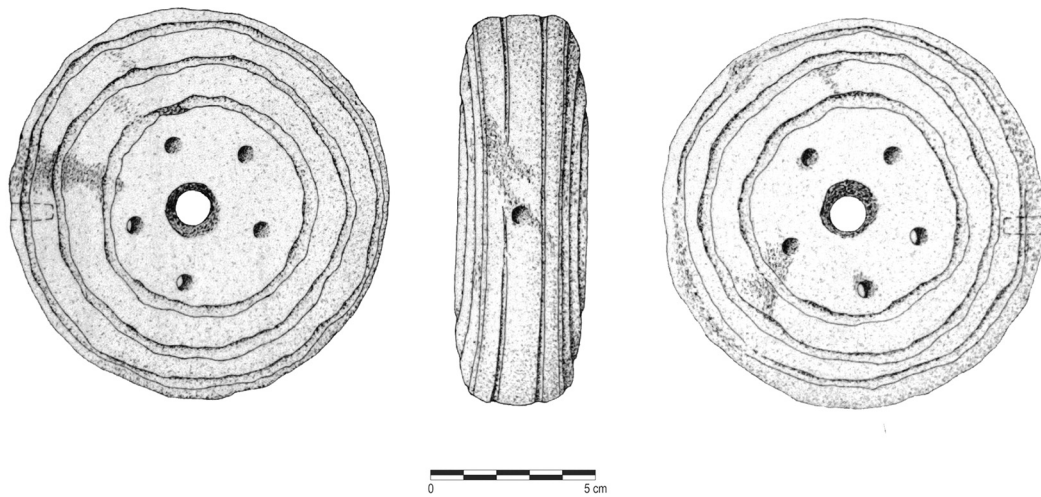
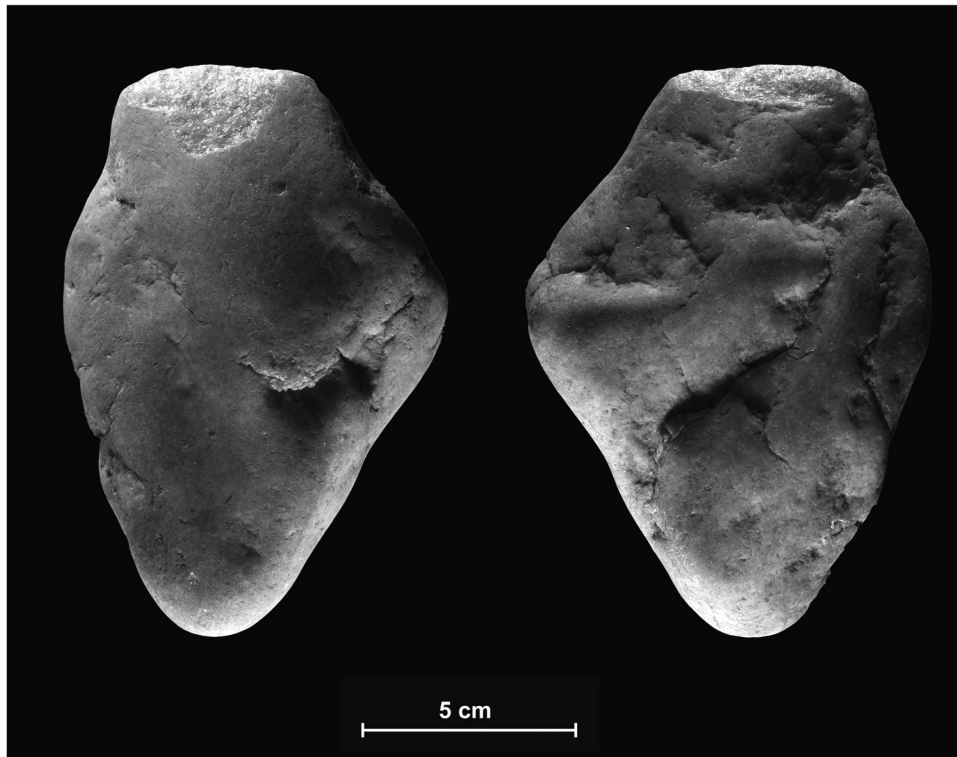


Figure 24.3: Top: Rechaba stone disc, with a decorative pattern of concentric circles; bottom: boulder with percussion marks recovered in Os Mouchos petroglyph (Rianxo, A Coruña)



communication mechanism – a sort of code of signals or messages – designed to mediate in the use of the landscape by neighbouring groups, establishing preferential or exclusive access by one of them to specific spaces with an economic and/or symbolic significance.

However, the evidence that a considerable proportion of the petroglyphs are located far from major pathways and from those points allowing a direct control of the most economically attractive areas (Peña & Rey 2001; Fábregas *et al.* 2010), together with the possible

existence of strategies which enabled people to modulate the perceptibility of the carvings from the surrounding space (by selecting more or less conspicuous rocks and profiting from the contrast between the colour of the grooves and that of the rock surface), has led us to review the interpretation of the Galician rock art as an open or hardly-restricted phenomenon; endorsing our revisionist approach come also the recent finds of prehistoric art inside small granitic rock-shelters.

The increasing evidence of the existence



Figure 24.4: *Coto da Braña 3* (Cotobade, Pontevedra) and *Pozo Ventura* (Poio, Pontevedra) (after A. de la Peña)



of physical constraints in the observation of petroglyphs, coupled with the acceptance of a certain ‘wish to hide’ that could exist in some of the open-air rock art sites, indicates the potential existence of an aim to define different levels of access to the petroglyphs and, according to them, of different audiences, a possibility that was first recognised in the Galician rock art by Richard Bradley (2002; 2009). At the same time, this fact makes clear the need to review the idea of this phenomenon as a simple ‘landscape marker’ meant to be seen by a broad audience, eventually surpassing the community responsible for the carvings to reach out other neighbouring and rival groups.

Consistent with this ‘open’ character, Galician petroglyphs were traditionally conceived – with very few exceptions (like the engravings of weapons) – as a phenomenon addressed to a general, passive and low-skilled audience. As stated before, there is a vast array of figures, geometric and naturalistic, sometimes amounting to complex scenes of hunting and riding. It is possible that many of these motifs had a relatively constrained

range of meanings while others would have been more polysemic (ie, a halberd or a human figure as compared to a cup-mark or a circular combination). However, the meaning of these images could be profoundly mutable from both a synchronic and diachronic point of view, since it would depend, to a great extent, on the characteristics of their audience, so that a given panel could encompass several layers of meaning, from practical information for accessing daily resources to sacred knowledge, and they would be available to the observer in so far as it had command of the necessary clues (Bradley 2002; 2009). This concept of audience substantially increases the polysemy of the petroglyphs while admitting a more active role to the observers; likewise, this circumstance, by itself, could have modulated the degree of accessibility of each petroglyph in an even more effective way than physical constraints did.

#### *Around the rocks*

For years now, one of the controversial issues among specialists has been the precise relationship between Galician rock art and the domestic sphere. The main obstacle to

this definition was the lack of data about the latter, which only recently could be overcome. Most researchers point to the coastal plain and mid-slope valleys as the preferential spaces for settlement, in contrast to the peaks and elevations – the ‘megalithic space’ – less densely occupied (Fábregas 2009; Peña & Rey 2001); other authors opted for an opposite view, considering precisely those higher areas more suitable for habitation, while the valleys would remain relatively empty (Santos 2010).

The difficulties associated with dense vegetation, the aggressive post-depositional processes, and the marked invisibility of the settlements themselves led to most of these being recorded through the work of commercial archaeology linked to major public works (generally of linear courses such as highways, railroads, pipelines, etc) whose results, although essential for our appraisal of the matter, often provide a partial picture.

The available data seem to suggest that around the mid-3rd millennium BC, coinciding with the introduction to the north-west of the Bell Beaker ware and a relative improvement in weather conditions (Fábregas *et al.* 2003), an expansion to the ‘megalithic space’ on the top of the sierras would have occurred, without meaning the abandonment of the areas occupied earlier. Although keeping much of its itinerant nature, settlements grow more complex at this point, probably in parallel with the increase of social asymmetry. Precisely at this time, the main creative impulse of the open-air rock art would have taken place, in a context of economic intensification involving an exploitation of different biotopes, necessary to sustain the processes described above.

In parallel to the notion of the alleged duality between densely settled zones and others virtually unoccupied, some authors have developed a dialectics of ‘sacred’ versus ‘domestic’ areas; in our view these schemes have somewhat curtailed the understanding of the open-air rock art as well as the space and the social context in which it arises. A number of authors (Edmonds 1999; Díaz-Andreu 2001; Insoll 2004; Bradley 2005) have strongly criticised the definition of ‘sacred’ and ‘ritual’ as opposed to and separate from ‘secular’ and ‘domestic’, a criticism particularly relevant to our case study, due to the proliferation in the last two decades of concepts such as ‘sacred landscapes’ (Parcero *et al.* 1998), a term that

loosely encompasses those places with a large accumulation of monuments (either megaliths or rock art), of which domestic activity would have been virtually ‘expelled’. In the case of Galician rock art, such segregation is mainly caused by a specific interest to frame the rock art in a period – the Iron Age – in which the separation begins to become clearer but also, to some extent, by the use of a rigid concept of ‘sacred’ and ‘ritual’.

The ritual probably had a polymorphic and variable nature and – as defined by its own conventions – could have materialised in many different ways and in relation to a variety of objects and contexts, ranging from those ceremonies of local, informal and ephemeral character to others highly organised and encoded (Bradley 2000) and may be simultaneously sacred and secular (Insoll 2004). In this sense, if we accept the idea that ritual does not have the sole purpose of communicating or transmitting religious beliefs and that mythological and/or symbolic features are a fundamental aspect of day-to-day activities, it becomes unnecessary to propose such a divide (Tilley 1994; Bradley 2000).

The data derived from the local archaeological record point towards the view that ritual and daily life are intertwined. The documentation of clearly ritual items, such as the ‘megalithic idols’ in the middle of a domestic site (Fábregas *et al.* 2007), the identification of structures for the segregation of the habitation space with close similarities to megalithic constructions (Gianotti & Cancela 2005) or, directly, the discovery of sites where the domestic and funerary-ritual spheres appear to be mixed and even confused (Vázquez Liz 2005; Aboal *et al.* 2005), lead us to think that prior to, and during the time of development of the petroglyphs everyday life and ritual would have been deeply interrelated.

Archaeological work at rock art sites also reinforces that idea: the few excavations have recorded the existence of elements with a possible ritual and domestic nature, as occurs in As Campurras site (Gondomar, Pontevedra): a petroglyph with several cup-marks beside which was documented a small pavement and an engraved *stela* as well as remains of huts and post-holes together with lithics and pottery; the whole area was surrounded by a bank (Villar 2008). The radiocarbon dates from the dwelling and the palaeosol coeval

to the *stela* (and probably to the petroglyph), roughly correspond to the first half of the 4th millennium BC (*ibid.*). Something very similar was reported at Betote (Sarria, Lugo), where a granitic outcrop displaying cup-marks was encircled by a lithic ring. Outside it, lithic and ceramic materials assignable to the Chalcolithic or Early Bronze Age (Cano 2008), as well as fire structures and ditches were found.

Another example comes from Crastoeiro (Vila Real, Portugal): the excavations undertaken around two petroglyphs displaying circular combinations and cup-marks documented stone pavings dating to the Second Iron Age, showing that these places were still relevant at that time; however, the finds of sherds belonging to the Final Neolithic and the Bronze Age could indicate that the panels were first carved during those periods (Dinis & Bettencourt 2009).

Special attention should be paid to the excavation at the foot of the petroglyph in Laxe dos Carballos (Campo Lameiro, Pontevedra). Although the results are considered preliminary (Santos 2008; Santos & Seoane 2010), this fact did not prevent the excavators from using it as a foundation stone for a controversial shift on the timing of almost the entire Galician rock art, which is ascribed by them to the 1st millennium BC. This interpretation is based on the existence of a layer, containing a channel and a post-hole, roughly dated between the 8th and 4th centuries BC, which has been related to the 'time of use' of the petroglyph on the basis of their consideration as the surface during the engraving episodes, since it '*coincides with the lower limit of the distribution of the carvings*' (Santos & Seoane 2010, 22). While the aforementioned level might be truly linked with activities held in front of the petroglyph at that later period, its alleged association with the entire engraving process is rather dubious. We believe that an argument based on such an extraordinary stratigraphic relationship must be handled with extreme caution, especially taking into account the complex soil processes documented in this area (Kaal *et al.* 2008) and the vast archaeological implications arising from this interpretation, for which—moreover—further support is hardly found in north-west Iberia.

With the exception of the mentioned sites, the space immediately adjacent to the petroglyphs usually provides very little material,

probably due to the shallow depth of the terrain and the often intense erosion, as observed in the petroglyphs of A Gurita (Porto do Son, A Coruña), Foxa da Vella and Os Mouchos (both in Rianxo, A Coruña) where only several boulders with evidence of percussions – probably used for the engraving of the motifs – could be recovered (Fig. 24.3), or Pedra das Procesións (Gondomar, Pontevedra), one of the largest petroglyphs in Galicia, depicting halberds and daggers, whose excavation only recovered a quartzite core with several flake removals, a piece of granite with evidence of abrasion and two small blocks of ochre, thought to be related to prehistoric painting (Vázquez 2005).

It is rather more common to find evidence of anthropogenic activities in a radius of a few hundred meters from the petroglyphs, where soils may be deeper. One good example was provided by the archaeological excavations carried out during the construction of the Rock Art Interpretation Centre of Campo Lameiro (Pontevedra), the area with the highest density of petroglyphs in north-west Iberia: a few hundred metres from several spectacular rock art sites, the foundations of many prehistoric huts were found (López & Méndez 2010); unfortunately, a precise chronology is not available yet.

In other cases, although the domestic nature of the sites found in the immediate vicinity of the petroglyphs cannot be proven beyond doubt, at least human activity has been demonstrated: in the surroundings of the petroglyph of Os Sagueiros (Rodeiro, Pontevedra), composed of several cup-marks, small quantities of lithics and pottery were recovered on the surface, including Bell-Beaker sherds; also 100 m from the aforementioned Pedra das Procesións, a pottery scatter was reported, featuring Chalcolithic pottery. The systematic fieldwalking around the carved rocks of Poza da Lagoa and Coto da Fenteira (Redondela, Pontevedra) led to the detection of several pottery scatters that could be tied to radiocarbon determinations framing them in the earlier Bronze Age; interestingly, one of the petroglyphs at Poza displayed several halberds and daggers (Fábregas 2009).

## Beyond the petroglyphs

The Galician open-air rock art is a complex event, open to analysis from multiple per-

spectives, thus making it one of the most dynamic study subjects from the recent prehistory of north-west Iberia. One of the main issues is precisely its chronology: as stated before, we think that, with present knowledge, there is little doubt that the 'hard core' of this phenomenon mainly belongs to the 3rd millennium BC. Nevertheless, this is also a phenomenon with a long history so there are motifs that arguably have roots in the local Neolithic and, likewise, there are indications that, long after their inception, some carved surfaces retained a degree of significance, up to the Late Bronze or the Iron Age.

When approaching the chronology of the petroglyphs we must consider their biography and sometimes several stages or 'strata of significance' might be distinguished: an initial one when the carvings were executed, an action perhaps linked to social gatherings or ritual activity; a second phase would contemplate the continuing use of the carved panels, with eventual additions or maintenance activities (as to the latter, we must bear in mind the evidence of repainting on megalithic slabs (see Carrera 2011) and also the signals of groove refreshing on certain surfaces) and deposition of materials or objects; a third stage would take place when the original use or meaning of the art was lost but the local communities, remaining aware of its presence, had still some interaction with the carved panels, adding new motifs or taking protective measures, including desecration or engraving apotropaic images such as crosses.

In this regard, we should note that the reading of rock art images involves knowledge, memories and iconic associations, all culturally mediated processes (Tilley 2008) affecting the ability to interpret the images and their perception too. From our present perspective, characterised by a profound visual nature in which sight is a primary sense for social development, is difficult to understand that a given individual may be unable to perceive certain images. Yet our experience with Galician traditional peasant societies – immersed in a less visual world – indicates that, quite often, they would be unable to perceive part of the motifs recorded in petroglyphs, despite having lived with them for centuries.

Working in areas close to the large concentrations of rock art, we have confirmed that most petroglyphs had gone unnoticed for

rural communities, even those panels with greater monumentality. Interestingly, this 'inability' would have fundamentally affected the figurative motifs (zoomorphs and, less so, weapons). In contrast, geometric motifs did not go so unnoticed, being formally close to daily items such as wheels or pans. It is no coincidence, in our view, that precisely these motifs are more affected by destruction and/or Christianisation episodes, as in Pedra Escrita (Oia, Pontevedra). In complex panels, with different kinds of figures, crosses and other modern motifs tend to concentrate exclusively or preferentially around the geometric elements, as seen in Pedra da Boullosa and Chan da Lagoa (Campo Lameiro, Pontevedra) or in Pedra Xestosa (Laxe, A Coruña).

The few studies on the folklore concur with our observations: Aparicio (1995; 1996) remarks the short number of panels associated to legends or myths. This folklore is indifferent to the motif being displayed but, curiously, it is mostly linked to crosses and other modern motifs, suggesting that these stories are relatively modern (*ibid.*), in contrast with megaliths or hill-forts, objects of attention and superstitions by the Galician peasantry ever since. We noted this same pattern when doing field work in the North Barbanza Peninsula, where, despite the monumentality of many panels, the few legends recorded were linked to peculiar formations in the landscape, while the petroglyphs themselves had gone virtually unnoticed. This may be due to the absence among these populations of the iconic associations necessary to 'read' the images and even to identify them as man-made products, although this hypothesis must be tested with further fieldwork.

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# Circular Images and Sinuous Paths: engaging with the biography of rock art research in the Atlantic façade of north-west Iberia

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*This paper deals with the epistemological journey of rock art studies in Galicia and north-west Portugal, bringing in views on the how our research legacy, the paradigms of mainstream archaeology and modern science shaped our current knowledge of what may be designated an Iberian Atlantic Art tradition. It reflects upon the contrasting history of research in both regions and discusses perspectives for future research.*

‘Kublai asked Marco: “You, who go about exploring and who see signs, can tell me towards which of these futures the favouring winds are driving us.”’

Italo Calvino 1974, 165

‘Science does not discover; rather it creates.’

Boaventura Sousa Santos 1992, 41

It is unquestionable that research on prehistoric art in Western Europe has seen a renewed interest over the last 20 years, but we may wonder as to how far the sheer enthusiasm on this subject has been accompanied with an equal concern with the actual ‘state of the art’ and, more importantly, with the role of our scientific heritage for present-day and future knowledge. If we look at the history of rock art research in the 20th century, there seems to have been a tendency, common to modern science in general, to see a given

paradigm or hegemonic model being replaced by another. This is more obvious in Palaeolithic art research, which has been a more disciplined field of study. But the increasing interest in the investigation of post-glacial rock art in recent years (which has been generally carried out at a distance from Palaeolithic art) developed alongside the advent of a variety of theoretical and methodological approaches working in fast succession or in concurrence and the resilience of traditional frameworks in some research circles. We may interpret this as a sign that we are moving in a transitional stage in this field of study, where the construction of knowledge seems to be flowing towards the adoption of methods which are more characteristic of humanities than of natural sciences.

The aim of this paper is to reflect upon the

‘state of the (post-glacial) art’ in Galicia and northern Portugal, guided by the following questions. To what extent have rock art studies been influenced (or not) by the epistemological trajectory of mainstream archaeology over time? How far does our research legacy determine the character of the questioning to our object of study and the sets of relationships we establish? To what extent are we able to draw links with the wider picture concerning the past and current paradigms underlying the construction of scientific knowledge in order to foresee a future?

Paradigm means ‘ordering’, ‘norm’, or ‘model’. It is the representation of a pattern to be followed. Paradigms seek to order the constituents of a given topic in an articulated whole in which the various parts constitute an axis of selection of elements that make up a unit. Traditionally, in the history of science, paradigms were created and accepted by the scientific community as a pre-condition for the development of research, implying that it remained confined to the study of its specific relationships and questionings. Thomas Kuhn came to define a ‘paradigm’ as a synonym for scientific community. For him the scientific community was composed of a group of scientists who shared the same paradigm therefore, to be a member of the scientific community would imply that the member would be knowledgeable of the paradigm pursued (eg, Kuhn 1977, 294). Although in scientific areas like Social Sciences, more than one explanatory model may coexist simultaneously, models tend to prevail longer in relatively isolated scientific communities, allied to the need for recognition of a particular research domain. One direct consequence of the (con)fusion between paradigm and scientific community is the marginalisation of proposals that do not follow the current model, and this can happen both through the rejection by those who hold the hegemony of knowledge or by the institutions to which they tend to be closely related.

Exploring the epistemological journey that underlies the acquisition and construction of knowledge on the post-glacial rock art of north-western Iberia has a vital role for the present and future development of research. Archaeology, as any other scientific branch, is instinctively and ‘immediately theoretical, social, political and autobiographical’ (Shanks

& Tilley 1987, 25–6; Santos 1992). Therefore our view cannot be dissociated from the social, cultural, and political contexts in which they were generated, from the personal background of individuals that constitute the scientific community and also from the ways in which the epistemological and historical evolution of the discipline is assessed (discussed in Alves 2003, chapters 2 and 3).

This overview shall be mainly focused on the century-long investigation in Galicia, given that northern Portugal did not develop such an epistemologically enriching and long-lasting research tradition (eg, Alves 2003). Thus, the history of research in Galicia may be approached under two different perspectives. One is the endogenous view that brings in the views of and by Galician researchers, which are mostly concerned with the internal characteristics and evolution of the rock art within the administrative borders (eg, Peña & Rey 2001). This is manifested both by the use of the term ‘Galician petroglyphs’, applied since the 1930s, and historiographically, by an emphasis on the ‘genealogical’ scientific heritage (*ibid.*). From the 1970s, the meagre internal discussion on the origins or stylistically similar contexts across wider regions may induce the incautious reader to look at the assemblage as a largely independent or autochthonous phenomenon, notwithstanding the fact that, in the 1950s, S. Lorenzo-Ruza had been keen in establishing wider links with the rock art in the British Isles and came even to define a ‘Galician-Atlantic group’ (1953).

The second is the exogenous view produced by foreign scholars and the ways in which they were integrated, or not, in Galician research. In the last century, authors like Breuil (1921), MacWhite (1951), Anati (1968), Bradley (1997) and others applied to the Galician reality theoretical and methodological frameworks experimented in other contexts across Europe, bringing in views on the wider connections of north-west Iberian rock art. The terminology used mirrors that same aim: for instance, Anati used the term ‘Galician-Portuguese carvings’ (1968) and Bradley introduced the concept of ‘Atlantic Art’ (1997). But if the research developed by many of these authors in the region was relatively short-lived, Bradley’s collaboration with Galician scholars and ongoing interest on the subject for the last 20 years, helped consolidate the idea that the



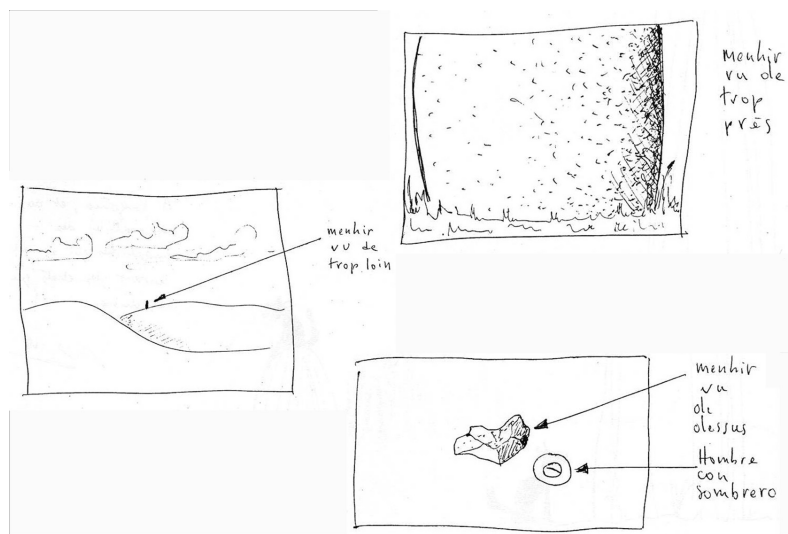


Figure 25.1: On the various approaches to prehistoric monuments by Michel Le Goffic (adapted from Bello & Lopez 1997)

regional group is bound to be understood within the wider picture of rock art along the Atlantic façade and in its relationship with neighbouring rock art traditions (eg, Bradley *et al.* 1994; 1994–5; 1995; 1996; Bradley 1997; 2000; 2009).

### Models and their fluid nature

In 1992, as an undergraduate student in Porto University (Portugal), I was taught that the origins and evolution of Palaeolithic Art was to be perceived in terms of a 4-phased stylistic sequence, in the light of the evolutionary model proposed by Leroi-Gourhan (1965). Palaeolithic cave art was to be understood as a ‘language of signs’, whose structure could be apprehended by the statistical analysis of the distribution of particular images in particular places within the cave. This would allow him to capture the rules behind the primeval intentional ordering with the purpose of drawing a model of an ‘ideal’ organisation of a Palaeolithic cave art sanctuary (*ibid.*). Soon after, I attended a conference by Richard Bradley in the same university, on his pioneer research on the post-glacial Iberian perspective focused on what was inscribed on the rock face, Bradley provided a view of the setting of open air rock art in the wider landscape (1991). It was conceived as a visual ‘system of communication’ deployed at particular places in the landscape (*ibid.*). One of the axes of investigation was to examine the relationship between the location of simple and complex

compositions/motifs in relation to particular places of the local topography (lowlands and upland areas), the presence of monuments and areas suitable for settlement in order to understand the syntax behind the deployment of geometric abstract imagery on the land (eg, Bradley *et al.* 1995). If Laming-Emperaire (1962) and Leroi-Gourhan (1965) introduced the study of the spatial context (and content) in Palaeolithic Art, diverging from the motif-focused perspective of Henri Breuil, Richard Bradley’s work generated an epistemological shift of similar nature in the study of post-glacial rock art across Atlantic Europe. By the mid-1990s, the discovery of cave art at Chauvet and Cosquer contributed to question Leroi-Gourhan’s evolutionary scheme and to the structure of his ‘ideal sanctuary’ (eg, Clottes 1998, 121–2), but was the structuralist paradigm to be entirely lost?

A brief retrospect, over a century of studies on prehistoric art in western Europe shows that cave art has been considered as images or objects created in moments of leisure and intended for mere contemplation (eg, Mortillet 1883), but was also regarded as manifestations of a religious nature, produced either in the context of sympathetic magic (eg, Breuil 1974) or in the context of shamanic rituals as a means of providing a dialogue with a transcendental world (eg, Clottes & Lewis-Williams 1998). Prehistoric art was also subjected to formal analysis aiming at the systematic inventory of motifs, its quantification and classification, analysed in evolutionary terms (eg, Anati 1994) and in the light of structuralism (eg, Leroi-Gourhan 1965). It was treated as ‘text’ and analysed in parallel within structuralist, Marxist perspectives and hermeneutics (eg, Tilley 1991). It was considered in its relationship with the landscape (eg, Bradley 1997) and in its relationship with ‘natural places’ (eg, Bradley 2000), but also from a phenomenological perspective (eg, Tilley 2004). Using the metaphor drawn by Le Goffic (in Bello & Bas 1997, 430) on the different frameworks in which monumental architecture have been approached (Fig. 25.1) it may be stated that rock art studies have generally been either too focused on what is visible on the surface of rocks or by looking at the object of study from a distance, which may lead to problems of interpretation! However, in recent years, the use of dialectical scales of analysis, from the

landscape to the rock face and *vice versa*, have been emphasised as a more holistic approach and experimented in different contexts (eg, Bradley 2000; Tilley 2004, 24–6; Alves 2003; Jones 2007).

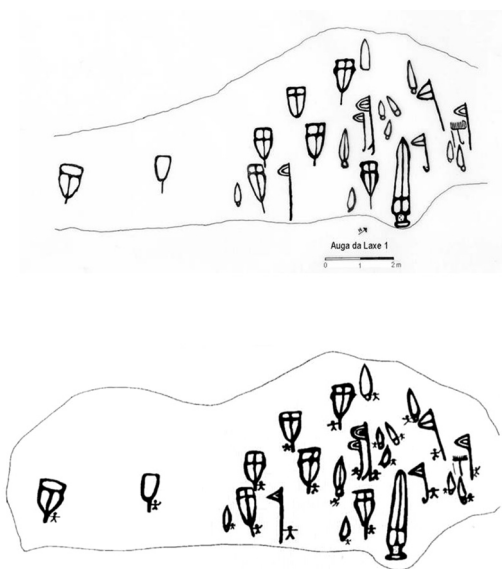
Yet, if we attend to the history of research in the Atlantic façade of north-western Iberia in the second half of the 20th century, and particularly to the Galician reality, providing its influential role, we may envisage the evolution of rock art studies from the 1970s to the mid-1990s, as influenced by theoretical frameworks at work in mainstream archaeology, particularly by three research baselines of New Archaeology, defined by David Clarke (1972, 6–7):

1. The morphological paradigm, which was intimately related with quantification, statistics and taxonomical approaches (*ibid.*), followed the positivist principle of the central role of Mathematics as the ‘language of science’ in which knowledge emerges from quantification, since what is not quantifiable was considered scientifically irrelevant (Santos 1992, 16). Thus, following this idea, prehistoric art – as a subject that, in the 1960s and 1970s, struggled to play a role in archaeological research beyond book illustration – was the object of quantification. Although, for some, objective description, typological classification and statistics were only a step of the way towards the construction of explanatory models, for others it was assumed pretty much as an end in itself. In the late 1970s, the arrival of a new generation of rock art researchers was accompanied by change in the discourse on Galician petroglyphs, challenging the influential work of E. Anati on the rock art of Galicia and northern Portugal in which he applied his general evolutionist framework inspired by the study of Valcamonica rock art (1968). Two important books on Galician rock art by Galician scholars date to the late 1970s–1980 (García & Peña 1980; Peña & Vázquez 1979). They both realigned the focus on the evidence within Galicia borders, aiming to produce an update of the ‘corpus’ and introduced an analytical perspective based primarily upon classification, quantification and statistics of individual designs and the relationship

between different typologies of motifs. The exercise of dividing and classifying meant that motifs were extracted from their original compositions and inserted in typological tables as if they were artefacts and each type was provided with a specific chronology. The diachronic framework established and accepted by the scientific community ranged, through time, from a more dilated sequence within the Bronze Age (Peña & Vázquez 1979) to a shorter sequence spanning from the Late Copper Age to the Early Bronze Age (Peña & Rey 1993).

2. The anthropological paradigm that, according to David Clarke, supposed the identification and study of patterning and variability in archaeological data and its relationship to patterning and variability in the social structures with which it formed an integral system (1972, 7). As social and cultural change were driven by evolutionary processes, they were thought to be scientifically predictable by the analysis of material data. Rock art studies in Galicia and northern Portugal sought the establishment of relationships between the material evidence, ie, individual motifs and particular social models by emphasising the presence of representations of weapons (daggers and halberds, in particular) dated to the end of the Copper Age and Early Bronze Age. As the chronology of weapon carvings was generalised to the main components of post-glacial rock art in north-west Iberia (geometric and curvilinear motifs and animal figures), the emergence of this tradition was considered to be linked to the emerging complex societies from that period (Bettencourt & Sanches 1998; Jorge 1991). In this context, in a book published in 1995, Vázquez Varela relates the origin of Galician petroglyphs with the ascending power of dominant classes and warrior elites. Overemphasising the significance of weapon carvings and certainly inspired in a design from Laxe das Ferraduras de Fentáns, he idealises the representations from Auga da Laxe with miniature sized warriors holding large weapons as symbols of power (1995) (Fig. 25.2).
3. The geographic paradigm that pre-supposes the spatial analysis of sites in order to define patterned systems of sites in the territory

Figure 25.2: Weapon carvings at Auga da Laxe (Galicia, Spain) (above), and the idealised picture produced by Vázquez Varela (below) (after Vázquez 1995, 47, 51)



and its relationship with the distribution of selective items, artefacts or features, according to a body of pre-conceived variables. Space and landscape were therefore considered a passive element, meant to be measured and quantified (eg, Thomas 1993), following Clarke's statement that 'a map will schematically present an idealised representation of a selected item and its distribution on a simplified projection of a map surface' (1972, 2). As all models, it is economical and assists us in passing 'generalised information in a highly compressed form' (Clarke, 1972, 3). This is particularly useful for data that can be easily understood and generalised. One influential study based on spatial analysis of Galician rock art was published in 1993. Replacing artefacts by rock art sites, the spatial relationship between their location, the pattern of settlements and burial record of the late 3rd beginning of the 2nd millennium BC was considered after the projection of 'site exploitation territories' by means of drawing a circumference corresponding to a 1 km ray around each selected site, signalled as an anonymous dot on the map (Peña & Rey 1993) (Fig. 25.3). This exercise, intended to frame the socio-cultural background of the communities responsible for the creation of rock art, gained extensive approval in the scientific community and the chronological proposal

was uncritically accepted despite the absence of in-depth testing of both the character of carved compositions and the archaeological data from each settlement and burial site.

However, working out the influence of the paradigms of New Archaeology in Galician rock art studies from the 1970s nearly until the end of the 20th century, encloses a paradox. In countries where the influence of New Archaeology was more significant, rock art studies tended to be largely marginalised for they were considered analytically irrelevant. In this respect, it was not unusual until recently to listen to comments like: 'rock art cannot be studied because it cannot be dated', or remarks, such as those on Goldhahn's decision of producing a PhD on rock art 'But, Joakim, rock art!? Why? There isn't anything left to say about them!' (Goldhahn *et al.* 2010, 2), or even, as David Whitley quotes, 'rock art is interesting but is not really archaeology' and, more fascinating, 'rock art is for little ladies in tennis shoes' (Whitley 2001, 16–17)! The emphasis was clearly set upon subjects that could be investigated by the methods provided by modern science, i.e. on the definition of patterned systems and technology. As earlier stated by Gordon Childe, science emerges from technology, not from magic or religion, whose essence is contradictory with that of experimental science (1947, 315).

Clearly, 'rock art' was, for many years, considered a secondary domain in Archaeology, not unlike Anthropology of Art for Social Anthropology (Gell 1992). Yet, in reality, far from the sphere of influence of Anglo-Saxon archaeology, in countries of southern Europe, the investigation of major rock art assemblages gained renewed strength in the 1960s and 1970s. This is the case of long-term site projects like Valcamonica (Italy), Mont Bego (France), Levantine and Schematic Art (south-eastern Spain), but also the discovery and salvage project of the Tagus valley rock art (Portugal), 40 years ago. Galician rock art studies witnessed the development of regional studies, bringing inventories up to date, cataloguing and recording hundreds of sites. In the 1980s a new phase in rock art studies was inaugurated in northern Portugal with the first comprehensive archaeological research on the subject by A. Martinho Baptista (eg, 1983–84; 1986).



*Figure 25.3: The model produced by Peña and Rey of the rock art in the Morrazo peninsula (Galicia) to show the spatial relationship with settlements and the burial record of the end of the 3rd millennium-beginning of the 2nd millennium BC (after Peña & Rey 1993)*

But if the influence of New (or Processual) Archaeology is sensed in prehistoric art studies in Iberia over the last 30 years, there is another which was equally relevant: the application of principles from Structuralism to prehistoric art and the evolution of André Leroi-Gourhan's thought. Both in Palaeolithic Art and post-glacial art, approaches inspired by Structuralism prevailed and some principles were incorporated in a more free-ranging structure of investigation where they were complementary with other methodologies. Knowledge would evolve not in a linear, strictly 'paradigm-oriented' trajectory, but in an inclusive, diversified, heuristic and holistic manner. Indeed, Margaret Conkey's analysis of the role of structuralist perspectives in rock art studies superbly demonstrates how they have, more or less explicitly, been recently applied in rock art investigation (2001). However, there is also an increasing interest on understanding

of rock art as social practice and investigating 'context', which was somehow marginalised by orthodox structuralism (Conkey 2001) perhaps for it aimed at breaking with the earlier emphasis on establishing direct parallels with selected ethnographic records by Henri Breuil (eg, 1974), and because the main goal was to investigate pattern, to find the logic behind patterning and establish its internal rules (Shanks & Tilley 1987, 100). Now, the aim is no longer to seek ideal models but regularities.

### **Current research and perspectives in rock art research in north-west Portugal**

Recent years have seen the development of important fieldwork and research projects in Galicia and northern Portugal both regarding open air rock art and megalithic art which have widened our perception of the distribution



and character of the subject of our study. In 2003–4, two doctoral theses were submitted to different universities. These aimed to rethink the regional assemblage in a more holistic perspective, one was more focused on the Galician open air rock art (Santos 2004), and the other on contrasting prehistoric rock art traditions in north-western Iberia: Atlantic Art, Schematic Art and Megalithic Art (Alves 2003). Curiously, the starting point of both theses was an in-depth re-evaluation of the above mentioned Peña and Rey (1993) study which established the short chronology of the rock art along the Iberian Atlantic façade within the late 3rd–beginning of the 2nd millennia BC. Although following slightly different approaches and methodologies of research, both theses analysed ‘context’, they aimed to re-assess rock art sites in the field, to look at their positioning in the landscape and to examine spatially associated archaeological sites. In addition, both carried out excavations at open air rock art sites and made use of the concept of ‘Atlantic Art’ (*ibid.*). However, they both came up with slightly distinct dating proposals for the largest expansion of Iberian Atlantic Art and, consequently, for the related social and cultural contexts. One study considered the origins and emergence of Atlantic Art in the Neolithic (end of the 4th millennium BC), in close association with the expansion of what C. Scarre called an Atlantic cosmology (2002) along the Atlantic façade of western Europe, developing through the Copper Age–Early Bronze Age, although not discarding the prevalence of the use of similar abstract imagery in later periods (Alves 2003). The other placed the major expansion of this group in the Bronze Age up to the Iron Age, not discarding, though, its origins in the 3rd millennium BC (Santos 2004).

Notwithstanding, there are clear indications about the paths currently and generally being followed in investigation, which point out to the need for rock art to be approached ‘contextually’, ‘historically’, and ‘dialectically’ (Alves 2003, 95–6). Contextually, because if rock art is a petrified shadow of past ideology, it is also the concrete reality that resulted from the interpretation, in prehistory, of an imaginary world perceived through a belief system unknown to us. Thus, we are left with mute material remains, which are bound to be accurately surveyed and recorded and which

we may experience in terms of their physicality and the sense of place (Bradley 2002, 231–2): the setting of the rock art in the landscape, its relationship to particular topographic features and to archaeological remains; the physical experience of the place, the presence of topographic restrictions, the forms in which the subject apprehends visual imagery, visibility to and from the site and the impact of the elements (Alves 2003). And, since ideology and symbolism are manifested in different spheres of social life, rock art studies should therefore be contextually inclusive.

Historically, because the use of wide systems of graphic representation, encompasses processes of adoption, transmission, or refutation. When accepted by a given community, rock art is already imbued with historical meaning, associated with memories and life experiences. As a network of inherited concepts, widely shared and deeply rooted in social praxis, rock art works as a mechanism of social cohesion and identity. Archaeology may approach the life history of rock art traditions by looking at the boundaries in which a particular tradition was adopted in contrast to the areas where it was rejected; whatever the proposed chronology, research should look at phenomena that overlap with, pre-date, and post-date its use. Despite the difficulty in setting the creation date of open air rock art sites, fieldwork strategies are increasingly more focused in combining different means of obtaining relative dating, such as the examination of figurative stratigraphies, the stylistic study of the objects or themes featured in composition, the analysis of the relationship between rock art and other archaeological sites in the landscape (being nevertheless aware of the problems raised by the visibility and invisibility of the archaeological record) and the assessment of the presence or absence of evidence for human activities associated with the use of rock art sites through excavation.

Dialectically, because in considering rock art as a symbolic system of communication, socially produced and historically transmitted, archaeologists may be able to capture its echoes in other spheres of human life. Hence, rock art is to be understood as the meeting point of several spheres of interaction and levels of significance. Enlarging the temporal, spatial, and conceptual scales of analysis and dealing with them dialectically may be helpful in finding

new questions and opening new routes of investigation. In terms of the spatial scale, Iberian Atlantic Art has been observed by comparing regional assemblages within the wider bio-geographical area and contrasting regional traditions in neighbouring zones, but also site analyses have been produced using a dialectical perspective from the landscape to the rock face. Enlarging the temporal scale of analysis allow us to think about the ways in which prehistoric rock art traditions evolved and how they were perceived, retained in the memory, re-used and experienced after its original meaning was lost. In the case of Iberian Atlantic Art it may shed light on the question of the long prevalence of the use of abstract and curvilinear motifs from the Neolithic up to the Iron Age but also to attend to the contemporary perception and experience of rock art and rock art sites for rural communities who dwell and share the land with these ancestral remains and even to incorporate modern traditions of carving on open air outcrops (eg, Alves 2001).

In fact, we may look to the north of Portugal as one of the most suitable regions to experiment with this three-folded perspective as a starting point for a new cycle of studies on this subject. As mentioned above, in Galicia, from the late 1970s, the work of A. de la Peña and others was fundamental to bring up to date and increase the *corpus* of Atlantic Art, consolidating the idea that rock carvings occur in large concentrations across particular geo-morphological units, therefore opening the route to carry out studies within the scope of landscape archaeology (eg, Bradley *et al.* 1994–5). However, the Portuguese reality was seen as quite different. Although it was long acknowledged that the distribution of this tradition spanned c. 150 km to the south of the Galician–Portuguese border, along the coast, down to the Vouga basin, the wide picture was composed of rather isolated finds scattered across the territory. The large majority of them were published in the first half of the 20th century by amateur archaeologists or local entrepreneurs. They mostly consisted of conspicuous rocks with monumental compositions, known by local communities since they were landmarks in their territories and generally attached to ancient stories and legends. Hence, with few exceptions, Atlantic Art in northern Portugal was perceived as an

extension of the Galician group where finds were substantially smaller in number and consisting of one or two carved rocks sited in a particular geo-morphological unit.

Over the last decade, however, archaeological surveys carried out in the surrounding areas of well-known Atlantic Art sites resulted in the discovery of additional carved rocks belonging to the same prehistoric tradition and, in some cases, of archaeological remains, allowing a contextual study. This is the case, for instance of Castroeiro rock carvings (Mondim de Basto) which are found within the perimeter of an Iron Age settlement (eg, Dinis 2010). Also, an investigation of the original location of ‘Pedra Partida de Ardegães’ (Maia), removed in 1961 to Porto where it was studied by E. Shee Twohig (1981), resulted in the identification of a larger assemblage of open air outcrops carved with circular designs characteristic of the Atlantic Art tradition, closely associated with megalithic tombs, surface scatters of finds from the Copper Age and Bronze Age as well as an occupation layer from the latter period unveiled in the excavation of a diagnostic trench (Ribeiro *et al.* 2010). Towards the coast, around the estuaries of the Lima, Âncora and Minho rivers, 15 Atlantic Art sites were inventoried after an in-depth re-assessment of earlier written references (Bettencourt 2009). Further north, in the region of Lanhelas (Caminha), on the banks of the Minho valley, where two rocks carved with animal figures and curvilinear motifs were known from the 1960s, field surveys carried out in the context of a salvage project allowed the discovery of three further surfaces carved with similar designs in their vicinity (eg, Alves 2008). Moreover, recent fieldwork in the area around Monte Faro (Valença) aiming to assess the character of the compositions and landscape setting of the nine rocks carved with Atlantic Art designs at Monte dos Fortes and Monte da Laje, published in the early 1980s (Cunha & Silva 1980), resulted, up to the present, in the identification of 34 additional carved surfaces. These are clustered at particular places in the landscape and the large majority of rocks contain a small number of motifs or a single motif, which forms seem to assemble in the few rocks that display complex and monumental compositions.

Thus, it seems that carved rocks with Atlantic Art imagery do not tend to be found in relative isolation but rather assembled in

clusters across the landscape and intimately related with specific geo-morphological units. The development of fieldwork focused on the landscape setting of Atlantic Art in northern Portugal will certainly allow us not only to test earlier models put forward to the Galician reality but also to conduct research on the internal dynamics of sites in relation to their natural and archaeological context under novel theoretical and methodological perspectives.

### Signs of things to come?

In this paper I followed some of the more or less sinuous paths carved on the biographical memorial of Portuguese and Galician rock art by researchers over time, opened with the conviction that they would lead to a better understanding of the lines and circles engraved in the past. It is not unintentional that, throughout this paper, there are a number of mentions of Shanks and Tilley's book *Social Theory and Archaeology*, first published in 1987. The preface of this book starts with the following sentence:

'Archaeologists for the first time in the history of the discipline are beginning to be faced with a wide variety of different theoretical perspectives on the past. The majority of these have only emerged in the last seven years and are currently having a major impact in breaking down the theoretical hegemony of positivism and functionalism which formed the twin pillars of "new" archaeology' (Shanks & Tilley 1987, vii)

Over 20 years later, it seems that echoes of change, challenge, and diversification of approaches arrive in the study of rock art in north-west Iberia and are beginning to have repercussions on the way in which rock art is perceived, interpreted, and investigated. As shown, the 'pillars' of New Archaeology were deeply influential until the turn of the century. Curiously, the year of 1987 is also the date of the first Portuguese edition of a book by the sociologist Boaventura Sousa Santos, published in English under the title *A Discourse on the Sciences* (1992, 9–42). The starting points of his critique of the dominant paradigm of modern science are some of the elementary questions raised by Jean-Jacques Rousseau in 1750:

'Is there any serious reason to replace the common sense knowledge we have of nature and of life, and which we share with the other men and women of

our society, with the scientific knowledge produced by a few and unavailable to the majority of the people?'

or

'Does science contribute to bridging the widening gap in our society between what one is and what one seems to be, between knowing how to say and knowing how to do, between theory and practice?'

to which Rousseau answers with a 'resounding no' (Santos 1992, 10–11). Not unlike Shanks and Tilley's line of approach, Sousa Santos, setting contemporary science in a 'transitional phase', produces a critique of the hegemony of positivism in social sciences and points to the signs of an emerging paradigm which encompasses the introduction of 'hot concepts capable of melting down the frontiers into which modern science has divided and enclosed reality' (1992, 36). In his view, four ideas or theses encapsulate the essence of the emerging paradigm, in his words, 'a social paradigm (the paradigm of decent life)' (1992, 30):

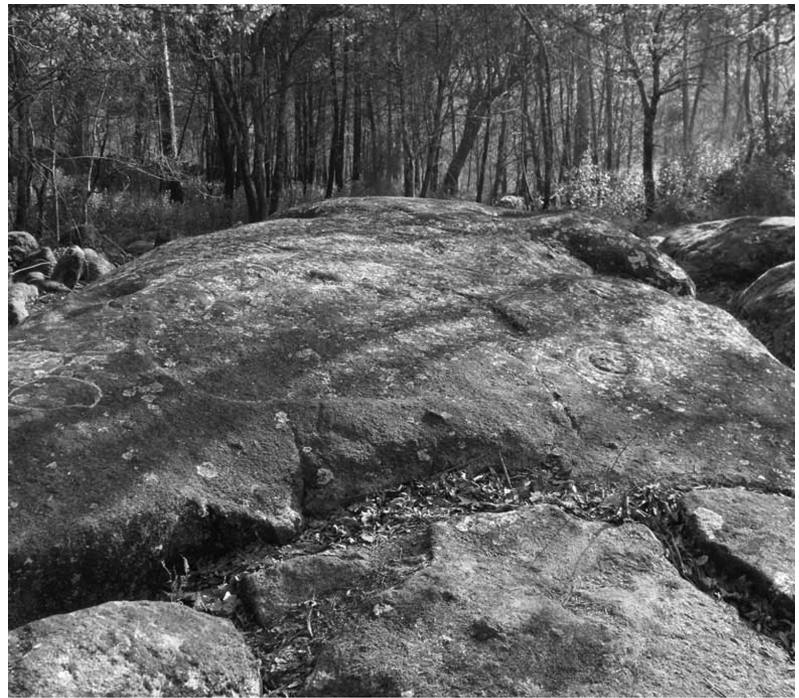
1. All natural-scientific knowledge is social-scientific knowledge, which presupposes breaking down the dichotomy between natural and social sciences and between nature/culture, natural/artificial, animate/inanimate; mind/matter, observer/observed, subjective/objective, animal/person;
2. All knowledge is local and total, implying that its fragmentation should be thematic instead of disciplinary, overcoming specialisation;
3. All knowledge is self-knowledge thus, providing that science is autobiographical and that the quality of knowledge should be evaluated less by what it controls than for the individual satisfaction of who shares and accesses it, in this sense scientific discourse has an affinity with artistic and literary creation;
4. All scientific knowledge aims to become common sense, as it is practical and pragmatic, it allows equal rights in the access to knowledge, 'it is rhetorical and metaphorical; it does not teach, it persuades'. Thus, common sense allied to scientific knowledge may lie at the heart of a new rationality by the time the 'phase of transition' ends (Santos 1992, 31–45).

Coming back to the subject of this paper, it is possible to glimpse some ideas that lie at the core of these four theses that make sense in



relation to rock art investigation. The opening of the threshold to this 'phase of transition' in rock art research in Iberia owes much to the introduction of methodological and theoretical approaches grounded on: a) a vision of the perception of the world as both natural and social; b) the conception of themes as galleries along which the various subjects meet and merge with one another (Santos 1992, 38); c) the perception of scientific creation as increasingly closer to art and literary creation; d) scientific knowledge having an affinity with common sense.

In previous papers I described how, at the beginning of my field research, contact with local communities entirely changed my views of rock art and rock art studies (Alves 2001; 2009). The initial idea of testing predictable models was overwhelmed by the memories and legends imbued both in the landscape, natural places and the sites built and created in ancestral times.<sup>1</sup> Indeed, dialogues with the past should conciliate multiple spheres of discourse on that same past, including its relevance to contemporary, non-urban, a-historical, cyclical-time driven, communities, since the ethnography of rock art can still be done (just!) in European regions where people maintain a traditional *modus vivendi* and an umbilical bound to the land (eg, Alves 2001; 2003; Sanches 2001). It is true that an increasingly more enriched experience of the landscape emerges from the awareness that it has an immaterial content that resonates with narratives embedded in ancestral knowledge (eg, Alves 2001; 2009). Therefore, I wish to end with a story: the legend of Penedo do Encanto, an open air abstract art work from prehistory (Baptista 1981) (Fig. 25.4). It was believed that the Moors, before going into retreat, had hidden all their gold inside the rock outcrop leaving behind an enchantment: only those who able to read the enigmatic signs carved on the surface of the rock will see the stone opening and reach the immeasurable wealth kept inside. Until now, the message behind the choreography of circles and lines carved on site remains to be deciphered. The treasure ... that is perhaps what is encapsulated in the riddle, which, to some extent, epitomises the profound challenge, interest, and emotion of an encounter with prehistoric art. We will never be able to read the signs, we may never



be able to fully understand the message but rock art keeps us moving forward in the pursuit of research, in telling stories and transmitting knowledge. Like Marco Polo and Kublai Kan in Calvino's *Invisible Cities*, as long as people are fond of listening to them, the study of prehistoric art will find its primordial place within archaeology.

*Figure 25.4: The carved outcrop of Penedo do Encanto (Ponte da Barca, Portugal) (photo: courtesy of Arqueobojo co; line drawings after Baptista 1981)*



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## Note

- 1 We are perhaps the last generation to have direct access to the oral tradition of local communities who have a deep attachment to a land made of what is visible and invisible, beliefs and rituals attached to natural and humanly altered rocks which meaningfulness was reinvented in the context of a traditional *modus vivendi*. With the advent of literacy and the profound changes implemented in the rural world, the dilution of a communal identity and practices like story telling have contributed to the rapid loss of an ancient imaginary world, the moors and the legends, the spirits in rocks and rivers ... As the generation of the 'eldest' leaves, stories on ancient sites are progressively being replaced by scientific history in the discourse that reaches local communities.

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## Advances in the Study of British Prehistoric Rock Art

*Stan Beckensall*

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*Rock art studies in Britain have been revolutionised in the past 30 years. Basic work in locating old and new sites, recording them and publishing them has provided a hefty archive for everyone to use. Although this has been invaluable, it has raised a series of questions that have not been satisfactorily answered, such as those concerning the origins and chronology of rock art; its location, and the reasons for its location; its biography of use, and its possible uses; and finally its possible meanings. Richard Bradley's contribution to the study of British prehistoric rock art has been important to both academic and 'independent' archaeologists. Above all, he has acknowledged how crucial the acquisition of data has been, has taken pains to foster dialogue with those involved in the process of field recording, and most importantly to help them to think about rock-art in a different way. His Rhind Lectures, 'Altering the Earth', paved the way for many to have a new outlook. I am one of those who has benefited from his dialogue and support since the 1980s. This reflection on his contribution to the study of British prehistoric rock art is written in appreciation of this support.*

There is a long tradition of fieldwork and recording of rock art (Beckensall in Mazel *et al.* 2007) chiefly among enthusiastic non-professionals, which has recently placed more emphasis on making sense of its position in the landscape. Many of us have developed an instinct about where to look for it, so a similar sense of Place must have been there in the past. The rapid growth of interest in it has brought many professionals into the field, concentrating on systematic, accurate recording. Many talents and interests have been brought together to examine particularly upland areas known to have concentrations of rock art, such as

Northumberland, Dumfries and Galloway. Such work also raises questions about why some rocks were chosen for marking even when there were what we think of as more suitable surfaces. Richard Bradley contributed to establishing a methodology.

In Britain, rock art occurs on many types of rock, such as outcrop, boulders, portable stones, earthfast stones, cairns, standing stones, and other monuments. A range of symbols is in use, mostly made on the rock by pecking with a hard stone tool. The most common symbol is the cup, a small shallow circular depression, often surrounded by



Figure 26.1: Complex rock art at the Ben Lawers site, overlooking Loch Tay



Figure 26.2: Ben Lawers: a rock outcrop excavated by Richard Bradley overlooking Loch Tay



Figure 26.3: Fowberry Plantation, Northumberland: a decorated slab has been removed from outcrop and the lower surface has been re-carved. The site is close to an excavated cairn on decorated outcrop with marked rocks in the cairn material



Figure 26.4: Part of a large panel at Hunterbough, Northumberland, discovered prior to excavation



one or more grooves, and commonly with a groove leading out of the cup. The motifs incorporating simple symbols can be very varied and many designs such as rosettes and rectangles are rare (Fig. 26.1).

For the surveys, a distinction was made between 'simple' and 'complex' motifs, the former with cups and a single ring, the latter with more than one ring. One of the key questions Richard asked concerned the different places within the landscape in which simple and complex motifs were carved. As a general rule (for there are important exceptions) the surveys led him to believe that the more complex motifs were on higher ground where paths might guide travellers to important ritual sites, whereas the simple motifs on the lower ground would have been cultivated by prehistoric farmers. The carvings were found to be concentrated in marginal areas of poor soils rather than at the highest points in the landscape, and looked down on the fertile areas such as valleys where, in the case of Northumberland and Kilmartin, most of the monuments are located. The coincidence of rock art and upland pastures also includes the location of water for animals and this prompted more work to be done on identifying carvings that seem to mark springs and other water sources. All these sites were plotted by his team and when the distribution of carvings was considered, the idea emerged that carvings were made by people whose lives were largely nomadic because the need to pasture or hunt animals continued even when arable farming tied people to a single place; the importance of 'mobility' was stressed – a factor that Richard thought had been overlooked by many prehistorians.

Linking the location of rock art with patterns of landscape inhabitation was a new idea; no one had previously seen it quite in this way. From this a further question arose: how far away from a decorated rock surface does one have to be before it is visible? As most carved rocks are on a horizontal surface, the answer was generally 'very close'. Today the location of sites may be inter-visible, but not the rocks themselves; the intervisibility of sites was noted as part of Richard's survey work.

For those readers who have not yet experienced rock art, there is much to be enjoyed, for the areas where it is found are new to many, sometimes off the beaten track, not easy to find, as many panels lie almost

horizontally, often covered with vegetation. The physical effort needed to find these rocks is made more rewarding by the intellectual curiosity that the quest provokes. The discovery of new sites is still being made, and there must be others still covered or unobserved. The location and recording of marked rocks has thrown up a number of questions that may be explained only by geophysical survey around them and by excavation. Does rock art stand in isolation, or is it the focus of more general activity? Scandinavian archaeologists have built excavation into their agenda, with varying results (Adoranten 2006), and some sites in Britain have been excavated recently, such as Hunterheugh in Northumberland (Waddington *et al.* 2005). When a survey of the Ben Lawers site overlooking Loch Tay produced over 100 marked rocks, one of the questions that arose was whether the viewpoints from them were obscured by trees, until Richard's excavation of some of the rocks revealed not only more motifs but also a quartz stone platform that overlay sealed-in pollen that demonstrated that the rock was at an unrestricted viewpoint (Fig. 26.2).

### Monumental use of rock art

Most rock art is in the landscape on outcrop and boulders. Although its distribution indicates routeways and viewpoints, more precise contexts are found in burial mounds, which range widely in date from Irish passage graves to small cairns built for single burials. My own excavations of the Weetwood and Fowberry sites in north Northumberland, although the former had been almost completely destroyed by a bulldozer, revealed that over 50 cobbles that made up the mounds incorporated cups and cups and rings. The Fowberry cairn was built on outcrop rock that had already been profusely covered with a repertoire of motifs, with only a thin sterile sand layer covering them under the cairn. Four of the double ring of kerbstones at Fowberry were cup-marked and the Weetwood kerb included a large boulder with complex cup and ring motifs that faced into the cairn. Neither cairn had burials (Beckensall 2001, chapter 3; 2006; 2009). Only a few metres away a cist-cover-shaped slab removed from outcrop may have been used for a burial (Fig. 26.3), after which the place from which it had come had been re-carved.

Here we have an example of how eroded pieces of outcrop could be used in later burials (Beckensall 2001, 63, 130). The excavation of the cairn at Hunterheugh, Northumberland (Waddington *et al.* 2005), revealed a large carved outcrop (Fig. 26.4) with some motifs re-carved after pieces had been quarried off. A scatter of cobbles over the surface may have been the remains of a cairn, but the sequence was complicated by an Iron Age enclosure wall that ran over the outcrop. The excavators concluded that there were different phases of carving, though no dates were available.

Excavations in the Boyne Valley of Ireland have established a splendid method of investigating rock-art in monuments. The tombs are different in some of their symbols from those in open-air art, and our experience of being in a man-made cave, full of ancestors' bones, dark, and mysterious, has caused many to speculate wildly about trance-induced states being a motive for rock art. The tombs are extraordinary creations, but the choice of symbol can be present elsewhere; indeed, the 'hidden art' on the stones that were used in building them shows a use of different kinds of symbol over many phases of building (Eogan 1984; 1986; 1997; 1997).

It was once assumed that the Clava Cairns, near Inverness, some with incorporated rock art, were built at the same time as Irish passage graves until Richard's excavations demonstrated that these Scottish cairns were all of Late Neolithic/Early Bronze Age dates. Cairns with associated rock-art are rare, even though it has long been noted that early antiquarian interest revealed decorated slabs placed within cists. Many of these were probably re-used slabs but a thorough and recent excavation at Witton Gilbert outside Durham city revealed a cist with cremations and an up-ended polished stone axe covered with a pristine carved slab made for the purpose, with cups and rings facing into the grave and cup-marks on the top. Other stones with carvings inside the cist were used to support the cover (Beckensall 1999, 137, Baker & Wright. 2009). This professional-led excavation produced radiocarbon dates of around 2000 BC, thus giving a date for the production of the cist cover as the last episode of the burial. Professor A. Harding writes:

Much attention had been paid in recent years to the dating of rock art, both in the open and on living rock and moveable slabs or cist covers. The Fulforth



Farm date is one of the very few that give at least a reasonable presumption that the art belongs to a specific time period' (in Baker & Wright 2009, 18).

It is incredible that such concrete evidence is so slight.

On Fylingdales Moor the stripping of heather by an accidental fire led to an excavation of part of a large cairn in an area of small decorated boulders where a uniquely patterned slab had been inserted as a kerbstone facing inwards, with a linear design like that on Beaker pottery. Here and elsewhere other cairns have been re-examined and many more carved rocks on their kerbs and in the mounds have been recorded (Brown & Chappell 2005). Landscape surveys have established the location of many panels of rock art where cairns have in some cases been linked with them in ritual practice and date. Some standing stones have carvings on them.

In Cumbria a prime site for investigation should be at Long Meg and her Daughters; aerial photography revealed a huge ditch to the north greater than the stone circle where the stones respect it at its northern flat end (Beckensall 2002, 59–70, 144–5). It is not clear what the relationship is between the highly-decorated red sandstone monolith and the igneous erratics that form the stone circle; here is an opportunity to examine not only the chronology of the site but also the reason why the monolith is there. There are, or have been, other stone circles and buried ditches located in the same area. A few decorated standing stones exist in Britain, but no programme of excavation has been directed at them. The case for targeted excavation for research is so obvious to further progress in rock-art research. Kilmartin Glen has a rich association of decorated cists (some depicting metal axes), lines of large cairns, stone circles (one with a spiral), bordered by richly decorated outcrops, including the largest of its kind in Britain at Achnabreck (Beckensall 2005).

Another context for rock art is in rock shelters, mainly found in Northumberland, but the locations now include Scotland. My excavation of a rock shelter in Northumberland at Corby's Crag (Beckensall 1976) revealed an overhang in which Mesolithic people had knapped flints and in which Early Bronze Age people buried an enlarged Food Vessel full of cremated bone under a triangular stone; on the top of the overhang was a large

basin surrounded by a groove. The use of the site continued when bell-pit workers carved themselves a seat in it, smoked clay pipes, and left some of their artefacts behind such as bottle fragments, a knife and teacup.

In the same county, a site that I first recorded, at Chatton Park Hill is called Ketley Crag, where the whole floor of the rock-shelter is covered with linked circular motifs, their grooves flowing down the gently-sloping surface. Unlike other overhangs at nearby Goatscrag Hill, which are high and cover cremation burials in urns, this gem of a place with magnificent views does not have enough room to stand in, and its choice for this carving is difficult or impossible to understand. I worked on a rubbing of the design in the winter on the dry floor, a technique which has now been made easier by using laser scanning and photogrammetry instead (Fig. 25.5 a and b).

Although the principal of 'non-contact' is a reasonable one so that surfaces are not damaged, much of the work in pre-laser days had relied on methods such as making careful rubbings as the basis for accurate recordings. Richard did not question this method, and his colleague John Coles (2005) used such a method to record hundreds of panels in Scandinavia. He and I are only too happy not to wear out our knees if new technology can save us from this. Technology moves on, but we must be modest and realistic enough not to criticise methods of recording before they were overtaken by new methods.

## Future excavation programmes

Dr Keith Boughie is already working on a programme of excavation in north-west Yorkshire. In County Durham Paul Frodsham led a community-based project in 2011 that involves the excavation of a large area around marked rocks to see what is focused on them (P. Frodsham, pers. comm.). This is an essential approach in Scandinavia too (see papers in *Adoranten* 2006). There are many sites known to us who work in the field that would probably repay meticulous excavation – which must be in the hands of specialists. The big danger is from curious non-specialists who may take it upon themselves to dig and ruin a site. For this reason, we keep some secret, but I give one pictorial example of a slab that I discovered which was lying horizontally at ground level

with other buried slabs and set in a shallow walled depression (Fig. 26.6). The slab is also an example of why we become excited with every new discovery. The next step is surely an extensive programme of similar excavations on sites where we know some of the answers to our questions may lie; those of us who know our sites well can pinpoint these.

## Theories

There were, and are, many wild theories floating around in all parts of the world, and we share a lack of certainty about origins, use and meanings, for rock art has taken on a mystical dimension for many who prefer to make up reasons for its existence, rather than convince us by producing evidence. This has always been the case; although those of us who are concerned with genuine research and evidence have our 'hunches' about the meaning of rock art, we admit that we cannot know its origins and cannot climb into the minds of people who lived over 4000 years ago. We know that some problems are as yet insoluble and that we must admit this, but go on trying to solve them. One development in rock art studies that I have found disconcerting is a widely-accepted view that the art is shamanic, trance-induced, and motivated by entoptic imagery. I find the scientific basis of this theory unsatisfactory (Beckensall 2009). The debate will go on (Helvenston & Bahn 2005). Until some new evidence is found, the 'meaning' of rock art will be uncertain. I am also sceptical of those who draw imaginary lines all over the landscape and devise significant mystical alignments within the rock art itself (Beckensall 2009, chapter 3).

There is no simple, universal explanation. However, there are other things to occupy us.

## Other concerns

There are very important issues of conservation of rock art, including what natural and human threats there are to its survival, where scientists and environmentalists hold a key position, as archaeologists may be neither (Beckensall 2009). The display of rock art to the public is under scrutiny, as very little has been done to further this. Good information on accessible sites is essential to informing people of the

value of their heritage and inspires them to take part in its preservation (Beckensall 2009, chapter 6).

## A formal, official framework for the continuing study of rock art

New discoveries on a grand scale have led rock art studies from being something of Cinderella status to a subject now taught in universities at many levels and the concern of government-funded research. Jonathan Last (in Barnett & Sharpe 2010) sums up the position that we have reached by a saying that the issue is now 'to draw it into the mainstream of prehistoric research – to contextualise, synthesise and interpret.'

In England, English Heritage took the lead in surveying the state of the art in its Rock Art Pilot Project, its report being published in 2000. This was of limited availability and the committee of which I was a member wanted an additional summary that would reach more people, but this did not happen. Since then, many years later, a project was funded that re-examined all rock art in Northumberland and Durham counties through their County Archaeologists, involving some training of volunteers in recording techniques, and the result is an attractive publication edited by Tertia Barnett and Kate Sharpe (2010) that has the sub-title 'New directions for research, management and presentation' – a hope that it may survive the financial problems that all organisations are facing in Britain. However, there are local communities with keen volunteers that are determined to go ahead with their agendas. Although the reports have been financed and organised through English Heritage, other countries and areas have been involved, notably Scandinavia, and Scotland. An advisory committee set up in 2005, known as RAMASES (Rock Art, Management, Access, Study and Educational Management) included rock-art specialists and organisations such as the National Trust and National Parks, to oversee the progress of research, and again included representatives from abroad.

I attended a small working conference of rock-art specialists at Eyzies de Tayac in the Dordogne in September 2005 where we shared our national research and prepared a joint statement on what was known about rock art, what policies should be followed to enlarge our



Figure 26.5: a) A drawing of Ketley Crag rock shelter motifs from a rubbing, checked with digital images and later confirmed by a laser scan; b) The location of the motifs under the rock overhang (Jan Brouwer)

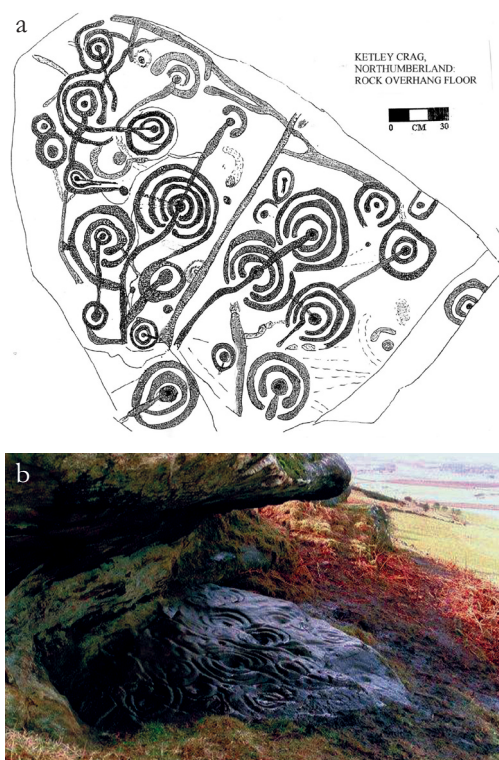


Figure 26.6: A superb example of rock art on a slab; only part exposed, and recovered. Its location is not publicised



understanding of it, what threats there were to it and how we could preserve it. The small number of people invited from all over the world were in agreement about what should be done and all were immensely enthusiastic about it. *'L'Art Parietal'* was published in 2009 through UNESCO, and UNESCO concluded with its official recommendations. It appealed to governments to respect the value of rock art to human heritage, to assess threats to it, report on its condition frequently, make sure that all finds are well surveyed and scientifically assessed and conserved, and to make people aware of its value. Among its statements is

that 'rock art sites are always segments of wider cultural landscapes', that there should be management plans 'to maintain the integrity of the site and its natural surroundings', that non-invasive techniques of recording should be promoted, that sites should be well-presented to the public and vulnerable ones covered over, and that income-generation should be part of the process. UNESCO itself was recommended to create a world-wide data base from national reports.

All this is an encouraging sign that at least rock art has entered the consciousness of international and national organisations, but whether governments will follow the recommendations is another matter. As the sharing of data internationally is agreed by many countries to be of prime importance (as in the UNESCO recommendations), it is to the great credit of Newcastle-on-Tyne University that it produced the first really successful website that has attracted millions of 'hits' internationally (Mazel in Beckensall 2009, appendix 6). Based on the author's archive of Northumberland, the result of years of unpaid work, it is a remarkable use of various talented people that has now been incorporated into *England's Rock Art (ERA) data base and website* (<http://archaeologicaldataservice.ac.uk/era>). Richard and I were asked to write our prefaces to the book, and in a way it marks the spirit of cooperation that exists between the professional and 'independent' involvement in the study of rock art. My hope is that the likes of George Currie in Scotland and Paul and Barbara Brown (eg, Brown & Brown 2008) in England will also be given support for the invaluable work that continues to be done. I hope too that all those bloggers who delight in the places where rock art is found and communicate their enthusiasm to each other will continue to have their eyes opened to the richness of our heritage, enjoy it, share it, and thereby help to preserve it.

This interest has brought people from abroad to discover and report new sites. It has been very sad recently, though, to hear of the death of Jan Brouwer of Holland who has joined with so many of us in the quest for knowledge and forged his own British Rock Art Website that has been enjoyed by so many.

## The personal side of rock art

Richard takes his place in a line of people

who have made the study of rock art such an important ingredient of our prehistory. Perhaps the main difference is that he came into the study as a professional archaeologist, whereas those before him were mainly independent. Among the latter were people like Sir James Simpson, with a distinguished career in medicine and surgery, whose work is still immensely important, especially for the questions that his research provoked. Ronald Morris, one of the most distinguished of researchers and the springboard of the modern study of carvings (see Morris 1979), was a lawyer. Richard himself came to archaeology before and after a university education in Law. Like the antiquarians of old, he too has a great cultural range of interests. I once took him to meet the landowner of a site in Northumberland where I had spent years excavating, and we had tea at his house. On his entrance into the house Richard at once spotted an important etching and noticed among the tea set some fine Japanese pieces. He spoke knowledgeably about his host's netsuke collection. The breadth of Richard's interests and knowledge is impressive; to have a Renaissance man in one's company is a great thing. Yet he does not use this knowledge to make others feel small. On one occasion when he stayed at my house I had an adult education class to give at the local High School in the evening on local history and he was keen to come along. He joined in as one of the class, and all 20 of us were enriched by his contribution.

I must mention another contribution from him in a different context. By coincidence I was going by train from Oxford to Bristol for a day's conference on Malta. I had lived and taught there for two years and wanted to know more about the excavations on Gozo in particular. By chance Richard was going to the same conference by train and we travelled together. I discovered that he had spent very little time on the island, but at the end he was called upon to speak. I was intrigued!

The conference was the usual mixture of some good stuff and some stuffy posturing, but when Richard got onto the platform the atmosphere became charged. He had extrapolated all the really important points simply by listening and gave the best talk of the day. He had a rapturous round of applause. I remember particularly how he began: 'There

is something special about islands ...' and he made it so. I wish that more speakers had his ability to sound interesting and to be so spontaneous and succinct.

The future of rock art research will build upon Richard's contribution, which ranks among the most significant. There are many problems, however. In the absence of proof about what the images mean and how they were used, much research has avoided some of the questions and concentrated on advanced methods of recording. This is all to the good, and inevitable that new technologies are brought to bear, but recording in itself, no matter how skilled, is not the only way forward.

I should like this short paper to remind all of us how many people have been involved in the resurgence of interest in our rock art, but I reserve my greatest tribute for Richard, who will certainly not retire from his research, but will produce more once he loses the duties of his job. He has always told me that he envies me the quantity of books that I have published, but he will soon surpass that!

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# Culturally Modified Trees: a discussion based on rock art images

*Peter Skoglund*

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*The relationship between people and trees in the Scandinavian Bronze Age is considered through the evidence of trees depicted on rock art panels. It is suggested that most trees on rock carvings might depict manipulated deciduous trees rather than conifers, as has been argued previously. Accepting this idea allows new perspectives on the relationship between people and trees to be considered. These depictions are not a true-to-life description of people's interactions with trees, but rather ones of rituals where the collection of leaves was a substantial element. This ambiguous status of the tree and its position within creation myths is highlighted. It is concluded that people in the north European Bronze Age used trees to elaborate ideas concerned with the place of humans in the world.*

A hallmark of Richard Bradley's work on rock art is to bring rock art images into the core of archaeological debate. According to him rock art is not a discipline of its own but something that should be used to widen our general understanding of prehistory. Inspired by this standpoint I will discuss trees depicted on Scandinavian rock art panels to explore the relationship between people and trees in the Bronze Age. In order to investigate this theme I argue we must rework our ideas of what a tree represents. In today's Western world trees are either growing more or less untouched by people in woodlands, or they are kept in parks and gardens and pruned for aesthetic reasons. On the contrary, trees in many cultures around the world are used differently – they are reshaped by people to fulfil specific needs – ie, they are culturally modified trees.

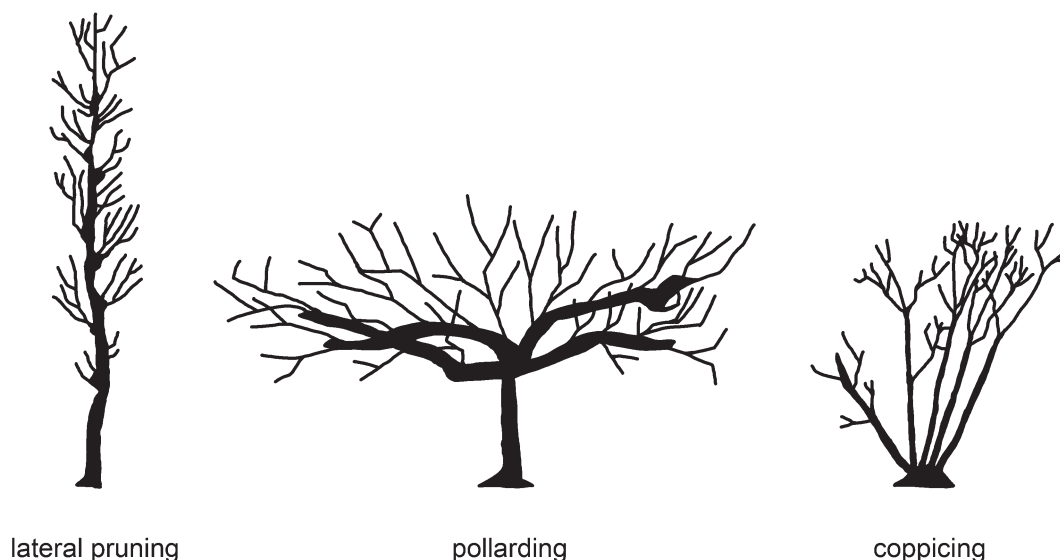
## **Culturally modified trees**

Since the 1980s there has been a growing interest in culturally modified trees. Important studies have been carried out in the Pacific North-east, Northern Fennoscandia and South Eastern Australia. Most studies have dealt with native people and their traditional use of forest, specially the use of bark for fodder, but also blazes found along historically important trails and the use of trees for carvings, and many other kinds of practices have been studied (Andersson 2005, 10–20).

A well known practice carried out in relation to culturally modified trees is native people's use of cedar trees in the Pacific North-west. Studies in British Columbia reveal that native people used the cedar tree and other kinds of trees for a broad variety of purposes. Still



Figure 27.1: Principal drawing of different ways of pruning trees



today there remain a substantial numbers of culturally modified trees in the Pacific Northwest (Stryd & Feddema 1998).

Another example is the collection of bark from pine; a well documented tradition in the northern hemisphere – ie, in the northern parts of Canada, Russia, and Scandinavia. In these areas the bark was one of the very few vitamin C sources that could prevent scurvy during the winter season. Since the bark was taken from a restricted part of the trunk the tree survived and many of these trees are still visible in today's landscape. Their age is impressive; studies of Scandinavian trees reveal that the oldest trace of bark peeling on standing trees is from the 15th century, but by dating sub-fossil logs we can trace this tradition a further 3000 years back in time. These trees are biological by definition but their character is shaped by man – they are on the border between nature and culture (Zachrisson *et al.* 2000; Östlund *et al.* 2002; 2004).

When it comes to trees depicted on rock art panels, very little has been done in trying to understand how these trees are related to the Bronze Age cultural landscape. Instead the trees have been regarded as exotic objects interpreted as evergreen spruces or yews that lacked any relationship to everyday life. In the following this perspective will be questioned. It will be argued that rock-art trees primarily depict pollarded deciduous trees.

### **Pollarding trees**

Pollarding, coppicing, and pruning of trees are well known practices in traditional European societies. Today the collection of leaf fodder mainly survives in rural areas in southern and eastern Europe; but before the industrial revolution in the 19th century coppicing trees and collecting leaves was – along with hay-making – the standard way of feeding animals during the winter (Emanuelsson 1996; Kirkby & Watkins 1998; Watkins 1998; Slotte 2000; Rackham 2003). The leaves could be reaped from the trees by hand or, more commonly, twigs and branches were cut down with a knife, saw, or axe. When the cutting was over the branches were bunched together in bundles. Either they were individually hung on stakes, or by standing trees, to dry, or bundles were stacked together in a leaf-stack. To stabilise the leaf stacks – which could take on impressive dimensions – a skeleton of poles was sometimes built to keep the bundles in place (Halstead & Tierney 1998; Slotte 2000).

In times of dearth – or when there was a limited spectrum of trees available – all kinds of trees could be used for pollarding. However there seems to be a general consensus that leaves from ash, elm and linden were preferred as animal fodder. Other trees mentioned in this context are birch, rowan and less often oak (Borgegård 1996; Slotte 2000).

Basically there seem to be three ways of manipulating trees to facilitate the collection

of leaf-fodder (Fig. 27.1) (Rackham 2003; Bergendorff & Emanuelsson 1996). I will discuss these three methods below.

- *Trees could be pruned laterally.* In this case the branches were cut off from the stem making the tree look pole-like. These trees were allowed to reach their natural height, whereby it was associated with some danger to collect the leaf. The top of the tree were reached by climbing on the branches, or the small stumps left after cutting away the branches.
- *Trees could be pollarded.* In this case the top of the branches were cut back at a height of 2–3 m, ie, above reach of grazing animals. From this treatment the tree took on the shape of a candelabra. The branches got closer to the ground and could be reached by using a ladder.
- *Trees could be coppiced.* In this case the tree was cut off close to the ground which triggered the production of branches from the stump. This way of manipulating a tree is less often used when collecting leaf only, but is an excellent way of getting many and straight branches of similar sizes that could be used for construction works.

These practices were widespread in Europe before industrialisation and can be observed in a pre-modern context on paintings illustrating agricultural work. Occasionally pictures on Egyptian, Greece and Roman frescos and vases suggest that most trees probably have been pollarded (Hægström 1996). Investigations of well preserved Alpine lake shore settlements dating to the Neolithic and the Bronze Age shed some light on the collection of leaf fodder in prehistory. From the analysis of twigs and faeces found in cultural layers at these settlements we know that goats and/or sheep were fed from leaves and twigs during the winter and early spring when there was a snow cover (Haas *et al.* 1998; Karg 1998; Akeret *et al.* 1999). Similar results are reported from other parts of Europe in those rare cases when there are comparable preservation conditions (Göransson 1995).

### *Spruce or deciduous trees?*

From the foregoing background discussion we will now consider whether trees on rock-carvings might depict manipulated trees.

In 1927 the Swedish archaeologist Oscar



Figure 27.2: Human in top of tree. Tanum parish, (RAÄ 66), Sweden

Almgren wrote a book that ever since has influenced the interpretations of Scandinavian rock art. Almgren argued that the rock art should be viewed from a ritual perspective and that the scenes depicted on the rocks reflected rituals carried out in reality. To make the points he made extensive comparisons with material from both Europe and the Near-Orient. For example he demonstrated that the Scandinavian rock art scenes with a man carrying a ship could be understood against the background of European carnivals and Ancient Egyptian rituals, where those ships were carried around by people in rituals (Almgren 1927).

Almgren has not only influenced the general idea of how Scandinavian rock art should be viewed, but he has also had a great impact on the understanding of specific details on the rock carvings like the tree. In his book Almgren stated that most of the trees depicted on the rock carvings represented spruce. This conclusion was based on the similarities in shape between the rock carving trees and the spruce (Almgren 1927, 17). Since 1927 the number of trees depicted in documented rock art panels has increased and today that there is a greater variation between the individual trees than Almgren was aware of. Despite this Almgren's suggestion that the trees represented spruces has not been questioned. The general

idea ever since Almgren's work is that the rock art trees are conifers, ie, spruces or yews (cf. Hygen & Bengtsson 1999; Andrén 2004, 404). Alternatively it is possible to argue that these trees are culturally modified – ie, shredded deciduous trees. I will discuss these arguments below.

The first point to note is the variety of shapes among the rock art trees. Among these are trees that resemble spruces, but there are also trees that lack a number of branches, or where the branches look different from what should be expected on a spruce. This variation is merely explained if one accepts these trees as manipulated. If the depictions are of manipulated trees, it is logical that in some cases the trees are shown with branches from the bottom to the top, and in other cases that the trees are shown with only a few branches.

The second point of the argument concerns the relationship between trees and people. In some of the trees there is a human depicted in the top of the tree (Fig. 27.2). It is of course possible to climb a conifer but it does not make sense in a practical way. In contrast you have to climb a manipulated tree in order to utilise the branches. The occurrence of people in the top of the trees therefore speaks in favour of these trees being manipulated.

The third point of the argument concerns the migration of spruce into Scandinavia and the absence of – or very limited occurrence of spruce – in the Bronze Age landscape. In contrast to all other trees in the Scandinavian Peninsula the spruce migrated from the north to the south. From pollen analysis we know that spruce joined the Scandinavian flora late. It was established in the Oslo and Stockholm area at a larger stand-scale around the birth of Christ and it moved southwards with a speed of 150–200 m a year. It never migrated naturally into southernmost Sweden and Denmark. The occurrence of Spruce in these areas is the result of plantations in the 19th and 20th centuries (Ohlson & Tryterud 1999; Giesecke 2004; Giesecke & Bennet 2004; Lindbladh 2004). However from pollen analysis we cannot rule out the possibility of individual spruces in southern Scandinavia during the Bronze Age; but if they existed spruces were a very rare tree in the landscape.

Accepting that rock art panels depict manipulated deciduous trees allows new

perspectives on the relationship between people and trees in the Bronze Age to be considered. In the following this will be elaborated by discussing the rock-art panel from Runohällen in the province of Bohuslän, Sweden.

#### *Runohällen and the leaf collection process*

Runohällen – ‘the runic panel’ – is located at Ryk in Bohuslän on the west coast of Sweden. The panel is rather large, measuring 9 x 6 m and parts of it are inclined at a considerable angle. On the panel are ships, humans, animals, foot soles, ring crosses, and circles depicted together with cup-marks (Fredell 2002; 2003, 163–7, pl. 13).

By measuring the height of the panel and comparing this with the known data on land-uplift processes for this part of Scandinavia it is possible to gain some idea of the dating of the panel. This work carried out by Johan Ling reveals that the cliff rose out of sea during the period 1700–1300 BC. Another way of dating the panel is from the ship images. The chronology of the Scandinavian ship images suggests that the first ships on the cliff were made during Montelius period II, 1500–1300 BC, but that new motifs were added throughout the Bronze Age (Ling 2008, 87ff, 136ff).

A famous and much discussed motif is a scene in the centre of the panel often referred to as ‘the may-pole’. Almgren interpreted this image as a tree being drawn by people holding ropes in their hands. He compared the scene to a tradition known from 19th century Sweden where trees were drawn on sledges and placed close to farms when weddings were celebrated (Almgren 1927, 104f). Another interpretation is that we see a pole or a tree where ropes are tied to the top and fastened on the ground by people bending their backs (Fredell 2002, 253).

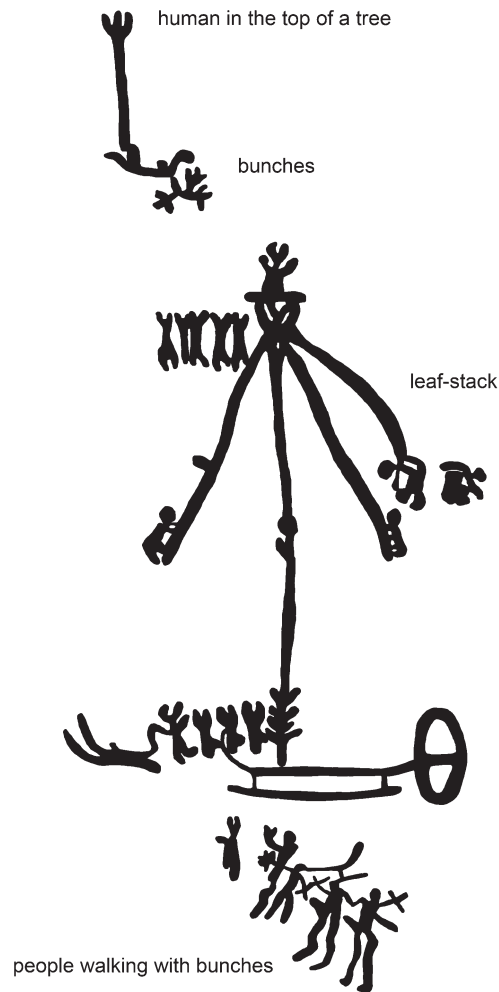
This motif has often been interpreted in isolation, but as Åsa Fredell has pointed out, it is connected to three other sceneries by the repeated occurrence of people wearing masks with horns or by objects divided in three edges. This notion is important because it indicates that we should see this scenery as a process involving several moments rather than as a static moment. Fredell interprets the motives as a process going from bottom to top and ending with an offering scene where the objects divided in three edges are submerged into the sea (Fredell 2002, 252–3). Generally the interpretations of the may-pole and the motives

surrounding it are characterised by a lack of will to discuss these kinds of rituals against the background of people's everyday interaction with trees. Looking at these sceneries from the perspective of pollarding adds substance to the interpretation of the presumed may-pole (Fig. 27.3).

Below the may-pole we find a tree. From the stem of the tree there are branches growing making this tree look like a tree pruned laterally. The tree is connected to the may-pole with a line that might represent the tree as shredded – ie, when the tree gets a pole-like appearance – but this is an uncertain assumption. To the left of the tree are four men with horns. People wearing horns are well known from Scandinavian rock art and the horns, or more probable a helmet with horns, signify their status as ritual specialists (Goldhahn 2007). Above and to the left of the may-pole we find a tree and in the top of the tree a human with raised arms. The interpretation of this as a tree with a human is based on the similarity with this motive and trees where the branches are clearly visible.

A very clear picture of this situation is found at another rock art panel at Tanum (RAÄ 66) (Fig. 27.2). Here we find a tree with an absence of branches in its upper part (as if they were cut away), but clearly visible in the lower part. At the top of the tree is a human with the arms stretched out and adorned with horns on the head. This situation closely resembles the situation at Runohällen, but at Runohällen all branches are cut away, and instead we find branches lying on the ground symbolised by objects divided in three edges. Below the opening scene we find these objects again – now in the hands of four people walking in a row. This make sense, if we presume that bunches with branches are being transported from the place where they were cut down, to a place where they could be dried and stored for consumption during the winter. Finally there is the presumed may-pole. The idea that the lines should represent ropes connected to a pole does not seem convincing. Instead we get an impression of four poles joined together and supporting a small floor attached to the top of the poles. Following the line of the earlier interpretations we can presume that it is a leaf-stack constructed with poles to stabilise bunches (Fig. 27.4).

Even though we cannot see the bunches



*Figure 27.3: Detail of Runohällen in Tanum. In this principal drawing scenes not connected to the ritual discussed in the text have been withdrawn*



*Figure 27.4: Leaf-stack constructed with poles to stabilise bunches. Slättbög parish, Sweden 1931. Photo by courtesy of Folkliivsarkivet, Lund, Sweden*

themselves there is much activity going on in this scene – a person is bending his back and stabilising a pole into the ground, another person is bending, as if pulling something up from the ground, and finally two men seem to be beginning to climb the poles as if they are moving the leaf-stack upwards. All these



actions can easily be associated with the construction of a leaf stack where a pole is put into the ground and bunches of branches are being transported from the ground to the stack. Finally it could be noted that a similar scene with two people climbing a pole is to found at a carving at Härkeberga in Upland (Coles 2000, 67–8).

### Ritual and reality

It is important to note that the images from Runohällen are not a true-to-life description of people's interactions with trees, but rather rituals where the collection of leaves was a substantial element. A laterally pruned tree of ash or elm reaches a height of 20–30 m. To climb the tree and cut down the branches from these kinds of trees required both skill and courage. Therefore it is not surprising that this special kind of work was ritualised and linked to a mythological world.

In focusing on the people participating in these rituals it is possible to put the discussion in a wider social and ritual context. A common denominator for many of the people depicted in the top of trees or in associations with trees is that they are wearing horns. People wearing masks with horns and blowing in lurs are also depicted in close connection to a ship with two trees aboard at Kalleby, also in northern Bohuslän (Almgren 1927, 14). From western Zealand in Denmark there is a unique find of masks made of bronze with horns probably dating to 1100–700 BC (Thrane 1975, 67). People wearing masks with horns are occasionally found on bronze miniatures and people with horns are represented on Scandinavian rock art (Goldhahn 2007, 331–41).

Various researchers have identified a set of objects that signify a male ritual specialist – among these are masks with horns, accompanied by masks with bird's heads, cult axes, extraordinary costumes including a tongue-shaped apron, and finally gestures like the hand with sprawling fingers (Kaul 1998, 16–35; Kristiansen & Larsson 2005; Goldhahn 2007, 331–41). It is these male ritual specialists we find standing in the top of trees in some of the rock-carvings in Bohuslän. The realistic depictions from Runohällen of people climbing trees, cutting down branches and building leaf-stacks go back to an everyday

experience – but what is depicted is the ritualised version of this experience.

Therefore, when looking at rock art or images we do not look at pictures that attempt to depict reality. We are looking at a ritual expression that is composed of observations from reality, but where these pieces of information are used to create figures that are logical according to a specific ritual, and not according to how the real world is constructed.

### Humans and trees

The close relationship between humans and animals has been used in many cultures to express and classify human-to-human relationships. According to Claude Lévi-Strauss animals were good to think with because they could be ordered in contrasting sets and hierarchies that were an analogue to the human world. This relationship between humans and animals is, for example, expressed in the totem identification of humans with animals among certain groups of native North Americans (Lévi-Strauss 1966; Bloch 1998). Like animals, trees too have certain characteristics that make them useful as metaphors in the struggle made by humankind to understand the relationship between themselves and the surrounding world. Trees are alive, but their lives are very different from those of humans and animals. They lack mobility, food incorporation, and their rhythm is annual rather than diurnal. But the fact that they are living and growing means they share some characteristics with humans; but the differences between humans and trees are greater than between humans and animals.

This ambiguous status of the tree – both close to man and alive but also very different and almost non-living – is often explored in creation myths where trees act as mediators between the non-living world and the living world. The creation of women and men out of trees is a well known theme; that is facilitated by the fact that trees lack an obvious sex and therefore they are easily associated with both women and men. Trees are often believed to be hermaphrodite and offer an excellent way to symbolise the reproductive couple – ie, the genderless potential of self-regeneration that comprises both female and male life principles (Rival 1998, 10). The identification of humans with trees is further facilitated by the close resemblance in shape between trees

and humans, something that is expressed in the associations between, for example, sap and blood, leaves and hair, limbs and arms, bark and skin, and the stem and the human body. These identifications come from a very close relationship between humans and trees where trees play an important role as sources for food and materials (Rival 1998, 10).

In pre-modern European societies people were engaged with trees in much more sophisticated ways than today. Trees were part of an annual cycle in which leaves, twigs, and branches were collected during summer and early autumn and stored as winter fodder for the animals. As people spent days and weeks on the field sowing and ploughing, they also spent days and weeks climbing around in trees, cutting down twigs and branches (Emanuelson 1996; Kirkby & Watkins 1998; Rackham 2003; Slotte 2000; Watkins 1998).

Through practice people gained a knowledge of trees that was very different from the view of modern people. Working with, and observing, trees was part of everyday life. Therefore people in the north European Bronze Age used trees to elaborate ideas concerned with the place of humans in the world. The trees on Scandinavian rock art images express an intricate relationship between people and trees – these Bronze Age trees are part of a worldwide tradition of using trees as mediators between earth and heaven and as metaphors for human life.

## Acknowledgement

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## Landscape Edges: directions for Bronze Age field systems

*David Yates*

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*Bronze Age field systems in southern England typically have straight boundaries. It appears to be the recognised form of boundary construction and in its purest form (coaxial land divisions) resulted in a gridded landscape with one prevailing axis of orientation. Adherence to the creation of linear landscapes suggests a marked degree of conformity in society. Two decades of developer-funded large-scale excavation have led to the discovery of many more instances of such field systems. Measuring the alignment of commercially excavated Bronze Age field systems in southern England suggests that the solar arc may have been one influence on their layout.*

'I believe that landscape, the outside world of things and events larger than ourselves is the proper place to find our deepest meanings ...' (Peter Lanyon 1964)

Measurement of the alignment of Bronze Age field systems excavated in lowland southern England suggests that the solar arc may have been one influence on their layout. That observation is supported by survey work on contemporary field plots on uplands in the same region. These monumental constructions are strange and complex. Recent discoveries caution that the elements of prehistoric landscape management may not follow the logic encountered in the historic period.

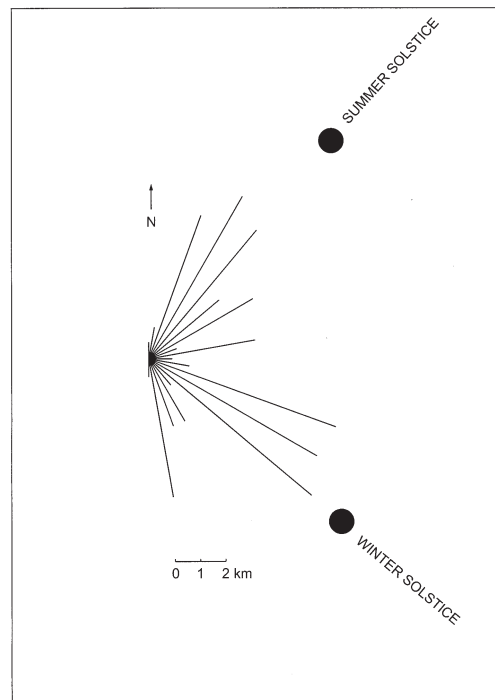
Distinctive rectilinear land divisions, comprising blocks of gridded terrain, were built in southern England during the late 2nd and early 1st millennia BC. These extraordinary structures in their purest form are *coaxial*

in layout, having one prevailing alignment. All the main spinal or axial boundaries line up with each other and point in the same direction. Where that rigid discipline breaks down and the area of rectilinear fields has no dominant orientation they are referred to as *aggregate* field systems. Their development was piecemeal, with blocks added together rather more haphazardly failing to strictly adhere to a particular plan (Bradley 1978, 268).

The *coaxial* and the *aggregate* field systems do however share one common feature – straight edges for each field plot. It is a design feature (particularly in the case of the coaxial field systems) that makes them inherently inflexible and oblivious to terrain. Consequently their straight unswerving boundaries ignore potential topographical obstructions. They are stamped on the landscape and, characteristically, in



Figure 28.1: The orientation of lowland Bronze Age straight boundaries in field systems (Compiled from Yates 2007; Lewis *et al.* 2006; Ladle & Woodward 2009, and Evans 2009)



south-eastern England they are the sole form of boundary construction. The straight edged field blocks monopolise the landscape. There are no signs of idiosyncratic farmsteads, having chaotic rough bordered fields, operating at the same time.

Using lines to determine enclosure plots suggests a degree of conformity in society and a commitment to rules or conventions as to how land should be divided up. Their scale of land division is striking (Bradley 1978, 269). The rectilinear field blocks represented the largest form of prehistoric construction. Considerable workforces would have been mobilised to achieve such planned enclosure. On the uplands, the two largest coaxial blocks on Dartmoor, Dartmeet and Rippon Tor, each cover 3000 ha (Fleming 1983, fig. 9). In Wessex, the still visible boundaries on the Salisbury Plain Training Area show a plethora of chequerboard field plots stretching over 40,000 ha (McOmish *et al.* 2002, fig. i.1). Around Fengate, Cambridgeshire, where Francis Pryor pioneered large area lowland excavation, straight boundaries divide over 600 ha of land on the immediate fen edge and such grids extend much further inland and out onto the fen islands (Evans *et al.* 2009, fig. 6.1). Along the River Thames developer-funded excavations around Heathrow Airport show

that 15,000 ha of river terraces were partitioned into field plots (Yates 2007, 32).

If each coaxial field system is defined as such because it has one prevailing axis or orientation, and we are looking at a marked degree of conformity in society, is there any evidence that many follow an underlying axis? Even the aggregate field systems stretch over large areas of countryside. In their weave is there any indication that they reflect awareness of a socially correct layout?

The work of Richard Bradley during the last decade, in completing major syntheses of developer-led discoveries, allows us to reflect on these questions. He has been able to determine the geographical limits of Bronze Age regimented field system construction in England (Bradley 2007a, 188), their apparent demise (Bradley & Yates 2007), and in work that he supervised (Yates 2007) their inherent complexity, composition, and development at different phases during the Bronze Age sequence. The collected corpus of material in these syntheses provides an opportunity to measure orientation. Whilst complete grid blocks are never visible in their entirety in lowland Britain, it is possible to piece together the fragments of regimented land divisions from site plans. Using published reports, particularly in the 'grey literature', it is possible to measure (using ruler and compass) the straight sections of the field blocks and their associated linear drove roads. Figure 28.1 offers the totalled results for the full range of eastings on the compass. The lines radiating out reflect the lengths of Bronze Age field boundaries that have been excavated in commercial work. Only those sections which have been clearly dated to the Bronze Age are included in the calculations and only those sections where the plans are to hand.

The results show the most prevalent axis (ie, the longest length of ditches at one bearing point) as striking out to the south-east (Fig. 28.1); to be more precise at a bearing of 130°, which is the azimuth of the midwinter solstice. A range of reciprocal return boundaries run to the north east and suggest transverse boundary alignment toward the midsummer solstice. These results offer one of the possible influences on the laying out of field plots. Others may reflect more localised traditions. For example, in the eastern fenlands and its feeder rivers it may have been that the watercourses and fen edge

formed the baseline for some of the coaxial blocks. At Raunds, on the River Nene, the river course provided the baseline for two coaxial field systems (Yates 2007, 93) and at Eyebury Quarry an overall curvilinear shaped field system enabled each land block to bend with the prevailing topography as the ground dropped down to the fen edge (*ibid.*, 89).

There have been major breakthroughs in the discovery of field systems in the southern England lowlands, but the numbers of ditch sections available for inclusion in this analysis is still very limited. More will be exposed in future large area excavation and new data will add to future analysis. There is also the danger that one or two key excavations on extensive field blocks may well skew the overall results. Finally, there is still the lack of chronological precision, so whilst we know that some of the field systems originate in the Early Bronze Age and the majority during the Middle and Late Bronze Age (Bradley 2007a, 188) it is not possible to chart precisely how orientations may have changed through time. However, the paramount importance of the 130° axis to date might suggest that at times during a thousand years of Bronze Age construction, some of the fields that were laid out followed a solar arc configuration.

If those lowland bearings were an isolated result the suggestion of a solar arc influence (the arc between the winter and summer solstices) would be an interesting if limited argument. However the findings from the lowland excavation results are supported by a much greater range of data derived from upland investigations.

Unlike the ditch remains uncovered in the lowlands, when topsoils are stripped, the legacy of the upland Bronze Age field systems is still visible. Many of these earthworks and standing structures have been extensively surveyed and selectively excavated to determine their age.

We begin with the elevated chalklands of south-east England where banks and ditches define the field plots. Then we shall look at the standing stone walls of the West Country.

The largest expanse of investigated chalkland is found in Wiltshire, comprising Salisbury Plain and the Marlborough Downs. Research here shows that two major orientations, above all others, appear to dominate the Bronze Age terrain. One axis runs from the north-west down to the south-east; the other runs from

the south-west to the north-east (McOmish *et al.* 2002, 54, fig. 3.4; McOmish 2005, 135; Fowler 2000, 25; Gingell 1992, fig. 96). That preferred choice seems to follow the sun influenced layouts shown in Figure 28.1 for the lowlands.

The largest survey on the chalk uplands was carried out by English Heritage Field Officers on the Salisbury Plain Training Area. Here they recorded a complex sequence of Bronze Age boundary construction with the earliest fields oriented north-east and south-west. It was concluded that considerable survey skill was required in order to achieve the straight edges for each component of the extensive field matrix. Approximately 15 coaxial blocks were recorded as sharing a very regular north-east to south-west axis; the largest covered some 1500 ha (McOmish *et al.* 2002, 153). The alignments appeared to have no agricultural advantage since many of the fields tilt away from the main direction of sunlight, whilst others are on heavily shaded slopes and most are on plateaux where the alignment is irrelevant (*ibid.*, 153). It was concluded that the geometric grids were adhered to regardless of the underlying topography and that the systems were laid out either in one large undertaking or in a series of rapid increments (McOmish *et al.* 2002, 54).

Nearby on the Marlborough Downs, Fowler records that there is a clear major orientation north-west/south-east with corresponding shorter lines north-east/south-west (2000, 25). Axial boundaries heading south-east would match the suggested layout for the lowlands. For Fowler the axial arrangement was constructed in a sustained act of land management (*ibid.*). Fowler's recording of the alignments show that the north-west/south-east axis runs at 134° east and the south-west/north-east axis at 44° east (Fowler 2000, 25, fig. 2.6).

Moving west, away from the chalk uplands, Bronze Age boundaries are marked by linear stone walling built from the local geological deposits. Exmoor only has a few fragments of coaxial blocks surviving on the higher open moor but those field blocks are laid out along a north-east/south-west axis (Riley & Wilson-North 2001, figs 2.35–6). On Dartmoor the boundaries are much more numerous and impressive; some of these ruined granite barriers are several kilometres long. The Dartmoor reave alignments, when measured and aggregated, show the predominance of

alignments on the 30–50° eastings range and another grouped around 120–150° east (Fleming 1983, fig. 9).

Further west still, the Cornish Bronze Age boundaries differ radically from those encountered in the southern central and south-eastern English counties. Here, straight boundaries are much less frequently used and the Bronze Age landscape is dominated by an array of freeform styles of wall construction which do not adhere to imposed conventions of regimented land design (Yates 2007, 69). A few coaxial field blocks were built within this individualistic countryside. They are less terrain oblivious than those found elsewhere in southern England and have no apparent preferred orientation beyond perhaps slight preferences against alignments due north–south (Cole *et al.* 2001, 13). A tendency to avoid the cardinal points in their orientation may reflect in part layout conventions followed elsewhere in southern England. Figure 28.1 shows that, as in Cornwall, the axes running due north, due east or due south were not favoured.

The notion of a solar arc coaxial field orientation is intriguing. The straight ditches and banks laid out on these bearings might be a daily reminder of one's place in the wider world. Sighted on the midwinter solstice at one end of the light continuum (the shortest day) the arc traverses the skies around to the longest day. Each grid then, is its own measure of the seasons. The results from lowland excavations (Fig. 28.1) and the findings from upland investigations suggest that the midwinter solstice alignment marks out some of the axial boundaries on the 130° azimuth; and their return transverse boundaries head out toward the 50° azimuth. How does this fit into the farming world? The shortest day defines the darkest time in winter. The sheep and cattle are confined to safe ground or penned in compounds or stalls for winter feeding. Winter work dominates what light there is, with woodworking, coppicing, fencing and fencing repairs occupying the working day. The ground might be saturated but soils (particular the loess), which can dry to a concrete-like constituency in the summer, can be dug more easily. It is a time of the year when farm workers can be mobilised for ditch digging, hedging or wall building. It is an interesting thought that some boundaries might have been surveyed

and constructed in the deep midwinter and their alignment marks the time of their creation.

Coaxial alignment using the solar arc is a vivid reminder of contrasts. Axial boundaries run out to the sun at its least powerful phase and consequently at a time when growth on a farm has virtually stopped. From that point as we swing round the arc we move from dark to light; from cold to warm; from dormancy to growth; and, from activity on the boundaries to activity within the boundaries.

The granite walls, field banks and ditches structuring these grids marked out an ordered landscape in which the farming people lived out their daily, precarious lives. People may have defined their place in the world by their contribution to the perpetual cycle of growth, decline and renewal in the farming regime (Bradley 2003; Williams 2003). That might explain why there are increasing finds of human cremated bone within the field blocks. If people regarded themselves as an integral part of the process of farming it may explain why they were buried here. Many of the answers to questions about people's engagement in the new world of farming, and what that world meant to them, may be scattered among these fields (Ingold 2000, 208). The discovery of token cremations of people who presumably once tended this landscape, suggests that we are examining a supernaturally charged landscape in which people, their livestock and their cultivated crops were closely linked in a complex cosmology (Kristiansen & Larsson 2005, 32). The rediscovery of ancestors in the landscape has produced a sense of unease, shaking our certainties over what to expect when excavating such apparently uniform and logical agricultural plots.

These regimented fields, which at first sight seem so familiar, may well be one of the most challenging forms of prehistoric site yet to be decoded. The realisation that the soils contain previous generations in their matrix raises interesting issues. Token cremations add to Williams's suggestion that the dead once owned the land (2010, 168), making field systems living monuments to earlier generations. Fields orientated on the solar arc might suggest that the straight edged boundaries were lifelines facing out to the ultimate symbol of regeneration: the sunrise. Certainly cremation discoveries in these massive monumental grids have been a major breakthrough in commercial projects.

The artist Peter Lanyon explored as many ways as possible of investigating landscapes. He resorted to a series of acrobatics on the ground and in the air in order to disrupt his conventional perception of what he saw (Causey 2006, 8; Stephens 2000, 155). He approached each 'familiar' landscape in a state of apprehension, a quality of unease that gained him an understanding of place (Stephens 2000, 15). Bradley in similar vein suggests that archaeologists need to perform mental gymnastics to look afresh at prehistoric landscapes. In studying the making of earlier prehistoric divided lands Bradley cautions that we must anticipate the unexpected. We must not assume that the elements of landscape management follow the logic we encounter in the historic period (2007b, 33: Fleming this volume). These prehistoric divisions, together with the grounds they enclose, are strange and unknown to us. We must investigate them from a stance of apprehension. Any complacency on our part or mistaken feeling of familiarity may result in the intricacies of these supernaturally charged landscapes escaping our attention.

Bronze Age fields are extraordinary structures. As more field systems are discovered we have the chance to improve our understanding of the subtleties of these landscapes. Greater chronological precision is required. It would enable us to explore the extent to which permanent Bronze Age boundaries immortalised earlier land and monument layouts.

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# Archaeology and the Repeatable Experiment: a comparative agenda

*Christopher Evans*

*The common presentation of archaeology as a finite resource and excavation as an ‘unrepeatable experiment’ fails to acknowledge the often startling density of archaeological traces emerging through current development-led fieldwork. Drawing upon case-studies from the Cambridgeshire Fenlands, this paper highlights the need for a comparative agenda of sites and finds/presence densities if we are to adequately understand the fabric of past landscapes. Moving beyond an increasingly anachronistic ‘flagship-site’ model that has characterised British archaeology for the last century, and engaging with the sheer scale and density of information produced by development-led archaeology, faces us with a ‘challenge of numbers’.*

‘The Antiquities are so exceeding old, that no Bookes doe reach them: so that there is no way to retrieve them but by *comparative antiquitie*, which I have writt upon the spot from the Monuments themselves.’ (J. Aubrey 1665–93, *Monumenta Britannica*, Ms Oxford, Bodleian Library, MS.Top.Gen.c.24:43; emphasis added; see Schnapp 2002)

The idea that excavation amounts to an ‘unrepeatable experiment’ is a deeply engrained and widely rehearsed axiom within our discipline (eg, Barker 1977, 12; see also eg, Reynolds & Barber 1984). Yet, though neatly rolling off the tongue, is this actually true? It certainly seems inherently contradictory. If the parameters of archaeology are not repeatable, then how can excavation in any way be considered an experiment rather than only some manner of entirely site-specific (earth-based) historical enquiry? This, of course, is not the case and

we fundamentally understand the past through *pattern* – stratigraphic/feature and material cultural associations and types – which can be comprehended or ‘read’ precisely because of their repetition (and, otherwise, variation from established norms).

A lesson from the discipline’s historiography is here appropriate: the 1859 Amiens axe question. Prestwich and Evans’s visit to France to officially adjudicate upon de Perthes’ findings of ‘flint-in-gravels’ must be counted as one of the great milestones of (pre-)history. Fully outlined in a recent paper (Gamble & Kruszynski 2009), the details of the story need not detain us. The pair duly reported back to both the Royal Society and the Society of Antiquaries of London, and their findings were then debated in the pages of *The Athenaeum* and

featured in *The Times* and *Illustrated London News*. Thereafter came broad academic acceptance of the stratigraphic association and, with it, the establishment of 'deep time' and the 'antiquity of mankind', thereby paying short-shrift to the 6000-year Biblical chronology.

While the discovery of the multiple origins of urbanism and agriculture certainly come close, it seems unlikely that anything that archaeology will ever achieve will match the impact of that visit and their adjudication. Yet, the key point is that the physical *proof* upon which this all hinged then went missing. Their absence only came to light when trying to locate sources for the Society of Antiquaries' *Making History* exhibition (Gaimster *et al.* 2007). No trace could then be found of the photograph that had been used to demonstrate the stratigraphic depth of the findings (a copy eventually coming to light in the Amiens Library), nor was the whereabouts of the famous axe itself known (it being unearthed in the Prestwich collection in the Natural History Museum; Gamble & Kruszynski 2009; see also Gamble & Moutsiou 2011).

The temporary loss of this material did not, however, really matter. Prestwich and Evans's London performances evidently swayed their academic and 'interested public' audiences, and in the years following their various pronouncements there was a scramble to demonstrate such 'deep time/strata' origins in a number of other quarry locales (see, eg, Van Riper 1993). The crux is that, in relationship to archaeology's 'big' problems and issues, *excavation is repeatable*. Given details are undoubtedly site-specific and some extraordinary sites can obviously only be counted as 'one-offs' (eg, Sutton Hoo or Stonehenge), but the broad picture of sequence – be it the characteristics of Palaeolithic *vs.* Neolithic flintwork, Roman wheelmade wares succeeding Iron Age handmade vessels, or the latter's predominant round-house tradition – repeat, and, in the end, that is what makes them meaningful. To argue otherwise is akin to saying that a series of laboratory procedures cannot be duplicated because the same Bunsen burner was not employed in each. Yes, archaeological remains are ultimately a finite resource, but recent fieldwork in Britain has shown that there is vastly more past than could have been conceived of 50 or even 20 years ago (ie, the finite can still be abundant).

## The challenge of numbers

The preceding section amounts to an exercise in historiographic polemic and is avowedly presentist in its intent (Murray & Evans 2008, 6–7). While the remainder of this paper's arguments could have been made without reference to the events of 1859, beyond rhetorical device this historical perspective highlights just how extraordinary is the current state of development-led archaeology in Britain. Indeed, it amounts to an unparalleled experiment in (near-) 'total archaeology', with almost everything being excavated, and given the pace of building – at least in southern England – never has so much been dug (by so many; at least prior to the current recession). This has now reached the point where many thousands of fieldwork 'interventions' occur annually in this country (see Yates 2007, fig. 12.7 for Bournemouth's Archaeological Investigation Project's plotting) and this clearly marks a sea-change in archaeological practice (see eg, Bradley 2006; Thomas 2008). Yet, we have embarked upon all this with little, if any, overarching co-ordination and, arguably, rather naively; as if so much more is just a matter of same-kind increase and does not have significant interpretative and methodological implications.

Accordingly, this paper might, if somewhat anachronistically, be sub-titled 'Musings on Development-led Practice in Southern Britain'. Among its case-studies are examples from the Cambridgeshire Fens, and I would like to think that its appearance in a volume celebrating Richard Bradley is appropriate on three accounts. First, his longstanding interest in the region's archaeology (eg, Bradley 1993; Yates & Bradley 2010); secondly, his field-techniques contributions (eg, Bradley 1984); and, finally, in relationship to his groundbreaking 2007 overview, *The Prehistory of Britain and Ireland*, that synthesised such a mass of development-generated 'grey literature' and to which, of course, Dave Yates' comparably seminal and wide-ranging field system studies (eg, 2007) – very much a Richard-fostered project – could also be added.

Taking a lead from Hodder's Çatalhöyük (1997) and post-processualism generally, recently the main impetus in fieldwork interpretation has largely focused upon reflexive approaches (eg, Andrews *et al.* 2000; Chadwick 2003; see

also Lucas 2001a for general overview). Yet, at least in Britain, in response to the explosion in archaeology, such trowel-edge perspectives are inherently inadequate, and phenomenological approaches can seem similarly short-sighted (eg, Bender *et al.* 2007). Given what can only be counted as *the challenge of numbers* – just how many sites are now known and variously investigated – it is as if we're withdrawing into an almost pixelated archaeology. It is too focused upon individual features; retreating from the possibilities generated by all this new data and side-stepping any attempt to make robustly meaningful statements about past social organisation/systems as a whole. But then this, of course, is equally true of the current state of theory and its ability to cope with, or even recognise, this vast increase in data (ie, one can only say deposits are 'ritual' so often).

Despite the enormous injection of resources into British archaeology through developer-funding, it would generally have to be said that this has not been marked by any particular innovation in excavation methodology *per se*. Its excavations are undoubtedly conducted to a higher overall standard (and often scale) and there has been considerable technical refinement largely arising from developments in computing; just as, equally, there have also been great advances in scientific techniques (eg, isotope, DNA and C-14 analyses) and environmental archaeology generally. Yet, on the whole, the actual techniques of digging have not developed at the same pace and, if anything, the application of many of the methodologies advanced in the 1970–80s – such as sieving and sampling of buried/topsoil strata through chemical analyses and artefact bulk-sampling – have actually declined. Indeed, given that we now know to what extent the evidence of pre-mid-2nd millennium BC occupation lies locked into such deposits (often with limited sub-surface register), that vast site-areas are now regularly stripped of these horizons with little or no investigation can only be considered woefully sub-standard. Indeed, such practices would not, for example, be thought acceptable in the Indian sub-continent, let alone America!

In this context, two examples from recent Cambridge Archaeological Unit (CAU) fenland sites will suffice, and the Unit has tried to implement strict methodological sampling

of surface deposits wherever logistically possible (see also, eg, Cooper & Edmonds 2007; Gdaniec *et al.* 2007). Arising out of the Haddenham Project fieldwork and furthered by the Fenland Management Project (Evans 2000a; Evans & Hodder 2006a; 2006b), both of these are quarry investigations and, together with Haddenham, they have been envisaged as relating to a unified Lower Ouse Environs Project; the CAU holding that (funding sources aside) there need be no intrinsic difference in the practice of development- and research-led archaeology. In the case of the great inland Roman barge-port and settlement at the Camp Ground, Earith (the same as that featured on the cover of Taylor's recent *An Atlas of Roman Rural Settlement in England* of 2007; see Evans *et al.* forthcoming), prior to its six month-long excavation programme we commissioned the site's (re-)ploughing; it was then fieldwalked (10 m grid over *c.* 5 ha) and intensively metal-detected. Not only did this yield a staggering *c.* 22,000 finds – nearly a fifth of the total from the excavations as a whole (including some 2000 coins) – but it provided the backbone of the site's spatial analysis and also singular insights concerning the location of middens and other surface phenomena.

At Barleycroft Farm/Over in Cambridgeshire the Unit has undertaken fieldwork in Hanson's great Needingworth Quarry for the last 15 years (see Evans & Knight 2000; Bradley 2007, fig. 4.7; Evans 2011). Eventually extending over *c.* 800 ha, the quarry spans both banks of the River Great Ouse where it debouches into the Fenland marshes; throughout, the project's abiding directive has been to explore the changing status of a river in prehistory: territorial divide and/or communication corridor? To this end, from the outset it has been held that strict methodological consistency across both of its banks is an absolute necessity. Aside from many tens of kilometres of evaluation trenching, this has involved hundreds of test pit-derived standard samples from its buried soil layers to appraise finds densities, and which now together contribute to an unparalleled mapping of its delta-like palaeo-topography overlain by plotting of differential artefact distributions on a truly grand scale.

Amid the many monuments that dot the alluvium- and peat-submerged landscape, these techniques have proven successful in the



discovery in a wide range of 'open' Neolithic occupation clusters (see Evans *et al.* 1999; and Garrow 2006 for overview) and, also, widespread Bronze Age field systems and settlements. Vast area-stripping is not an option as its deeply buried terraces carry up to 1–3.0 m overburden and site-exposure usually requires two stages: first down to the buried soil horizons (which are duly sample-tested) and then, again, down to the gravel terrace levels where features are generally visible. The trick, therefore, is how to tease-out and distinguish just what constitutes 'sites' of different periods. It is understood that 'off-site' landscape-usage and settlements *per se* constitute a gradient of activity (ie, no site is an 'island') and, accordingly, there is a pressing need to develop methodologies that allow for a greater 'enfolding' or intermeshing of site excavation and landscape evaluation fieldwork stages.

2008 saw the quarry's most ambitious excavation to date. This involved a *c.* 600 m-long exposure (*c.* 5.4 ha) of a marked sand-ridge rise flanked by ancient palaeochannels on all of its sides. Entitled by us as *The Godwin Ridge*, this was variously dotted by distinct Grooved Ware-, Beaker- and Collared Urn-attributed settlement clusters, with up to half the ridge-area covered by a Middle Bronze Age enclosure system and which also saw subsequent Late Bronze and Iron Age settlement foci (the latter including a riverside shrine complex). Yet, only less than a quarter of the 70,000 finds recovered in total came from sub-surface features associated with these occupations, with the remainder all retrieved from either the surface of the buried soil or the some 700 hand-dug metre-square test pits deployed towards its sampling. Seeing widespread pottery densities in excess of 20 sherds per metre (locally attesting to later Bronze Age middening) and, elsewhere, worked flint levels occurring at more than 200 pieces per metre, the highest values of the latter related to a Mesolithic camp located at the ridge's south-western end and which had no sub-surface feature register whatsoever. Factoring up, the ridge's buried soil must, in total, have encompassed more than a million finds.

Crucially, the site's sampling demonstrated just how many of the sequence's 'occupations' only occurred as surface events (Fig. 29.1).

While we are accustomed to the idea of such Mesolithic and Neolithic scatters, the same is not true of subsequent periods and it certainly came as a surprise to find such extensive Bronze and Iron Age 'surface usage' (-only). Though many of the ridge's cut-feature sites also had surface registration, the addition of these separately identified scatters takes the total number of its 'occupations' up from 15 to 35. Given that many other such surface spreads must have escaped our sampling 'net' – in other words, only the tip of the ridge's 'depositional iceberg' was glimpsed – this has major interpretative consequences. Greatly complicating our establish 'picture of the past' and belying easy landscape narratives (see Evans 2007), only by admitting just how much evades normative excavation practices can we achieve any sense of, in effect, *making 'time'/sequences work in landscape*. We cannot, for example, realistically argue for direct land-use continuity based, let's say, on only the recovery of a single Beaker pit cluster, as those features might only reflect ten years' use when the period spanned centuries. Only by recognising that the era would have also seen innumerable (surface-only) 'visitations' do we begin to glimpse the true complexity of landscape sequences.

One could go on concerning the site; for example, the quantity of fish and other wild species in its Bronze Age faunal assemblage or its channel-edge loose human bone and votive deposition (including separate 'clutches' of Bronze Age metalwork, Iron Age weaving combs and brooches). However, the key point is that the true character of this ridge-top complex was only realised through its intensive buried soil investigations; such exercises must not be considered as any kind of bolt-on luxury. To disregard the surface-distribution data, as is now too often the case in 'big strip' excavations, is to ignore a major component of sites of all periods and, even more damning, to jettison much of the prime occupation record of earlier prehistory.

## Period tables and the fabric of land

Numbers count in any excavation; amid what can seem the plethora of current fieldwork, one site's results can too easily seem much like another and have only limited impact. A pressing problem is that, despite announced intentions of striving for subtly nuanced pasts

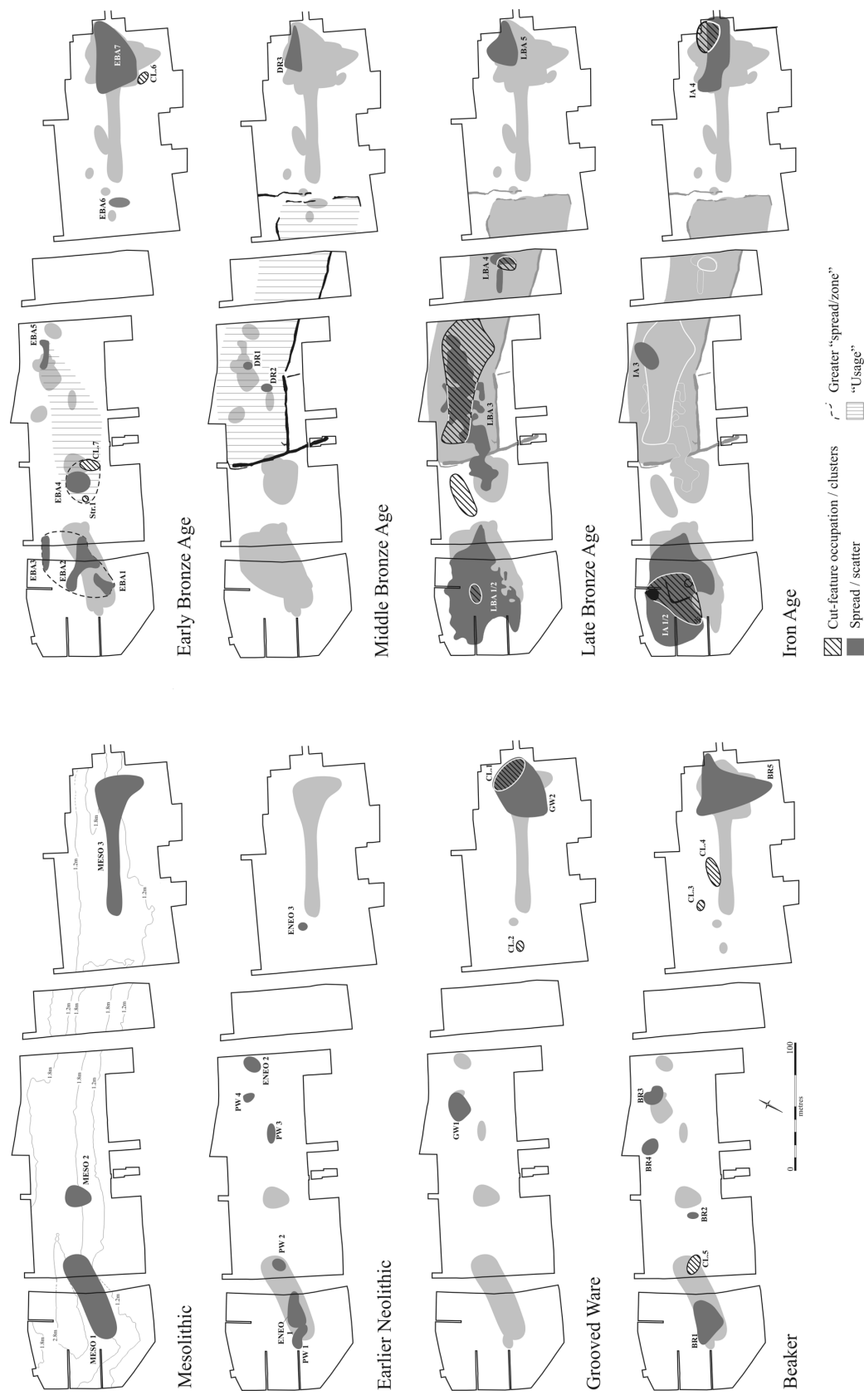


Figure 29.1: The Godwin Ridge phasing sequence

(and their depositional practices), the 10–20% site-excavation sample that is too widely applied usually yields too few artefacts to actually allow for detailed distributional patterning. Moreover, low-sample finds numbers often mean that many assemblages are now just too small to significantly contribute to the study of any period's economy or material culture: to make authoritative statements about the past requires more substantive numbers than today's standard-intensity excavations usually generate.

In reference to the Aubrey passage that introduces this paper and what is, in effect, its declaration that comparative analysis sits at the heart of the archaeological method ('comparative antiquitie'), given the sheer number of sites now investigated the development of base-line site measures is essential. As things stand, there is simply no reasonable means to directly compare the result of one excavation against another. It is clearly unacceptable that, for example, we can currently have it said that an Iron Age settlement yielding, let's say, 2500 sherds represents a high density of pottery-usage/-discard; whereas another, with perhaps 5000 pieces, produced only moderate quantities.

Nor is this just a shortcoming of today's professional practice. Earlier, more academic research-based excavations were often equally remiss in the presentation of base-line data. It took, for example, enormous effort to compile the causewayed enclosure-circuit finds density table for the Haddenham volume (Evans & Hodder 2006a, table 5.35; see also Evans *et al.* 2006, table 12). Over the last decade the CAU has assembled a number of such site-comparative 'league tables', ranging from the relative frequency of wheel/handmade and Scored Ware pottery on Late Iron Age settlements (Evans *et al.* 2007, table 8) to the area-factored broad-category finds densities across classes of Roman rural sites (Table 29.1). These have all been very much 'first attempts' and not here proposed as any kind of hard-and-fast presentational model. Nevertheless, based on the premise that 'numbers are good to think with' ('too'; cf. Bloch 1998), without such bottom-line statistics there is no reasonable means to scrutinise finds densities across different categories of Iron Age or Roman settlements or, indeed, whether it is valid to state that some causewayed enclosures

may have seen contemporary settlement while others probably did not.

Appraising finds densities from one site to another is obviously as dependent upon the size of an excavation and the intensity to which it was dug, as the density, duration and status of its settlement (this kind of information is not currently recorded as part of the national OASIS Data Collection initiative). It is the latter that we want ultimately to be able to understand and, in order to achieve this, we need to be able to comparatively gauge (and factor for) various excavation techniques and their intensities. This would not, in itself, be difficult given present GIS/computing technology. It need involve no more than clear statements of the size of any site and cubic capacity of deposits that were excavated from any one period of its sequence, plus the number/weight of the artefacts assigned to each. Other information would obviously, though, also be useful: the number of roofed structures per period (and their square-metreage) and, also, the percentage of deposits that were subject to sieving. Yet, it could be further argued that it is also incumbent upon excavators to produce one final figure, that being the total estimated artefact population of their sites (broken down by period and finds category; see Evans 2003 for such modelling). Including topsoil/soil 'overburden' densities, it is only by generating these numbers that we can fully appraise whether a site's sampling techniques (and the finds fraction of the total they yielded) is appropriate to the interpretative inferences that are drawn.

On reading much 1960s and '70s (*c.* 225 km) archaeology, it is clear that many practitioners then thought that there were relatively few sites in the British countryside. Indeed, rarity value was evidently one of the main factors propelling the Rescue ethos of the day (and the adoption of intensive excavation strategies such as at Mucking or Fengate; see Lucas 2001b concerning 'destruction and excavation rhetoric'). Of course, they were aware that they did not then control the total number of sites. Yet, the impression is that they envisaged the ratio of known-to-unknown sites to be in the range of, perhaps, a factor of two- to ten-fold and not the hundreds that we now know to be true.

It is difficult to understand how they could conceive that such low density societies actually 'worked', and certainly it suggests a

lack of familiarity with relevant ethnography. It undoubtedly affected earlier interpretation; most obvious in the case of prehistory is the application of various modes of transhumant modelling (largely driven by Cambridge's palaeo-economic archaeology of the time; eg, Higgs & Jarman 1975). It proved a *deus ex machina* to link widely distributed site-dots and thus was a prime means to explain the dispersion of style zones/types over distances. The notion of 'wandering smiths' or, for example in Roman archaeology, 'migrant potters', similarly stemmed from this; if settlements lay many kilometres distant from each other how else could widespread (material) culture change/spread be accounted for?

It could, in fact, be argued that a basic grasp of any period's population densities – sites and/or people – should be essential for theory-building as it evidently is the root-determinate of so much. In this capacity, the approaches of Groube (eg, 1981; see also Groube & Bowden 1982) and Atkinson were exceptional:

'Discussion or estimates of prehistoric populations are conspicuously rare in the literature ... At the most basic level, we need to take account of the numerical size of the non-literate communities of prehistory. The communication of new ideas from one community to another, the imitation of unfamiliar but attractive patterns of behaviour, the acceptance of fashionable novelties – or, for that matter, the rejection of available innovation – are all processes of cultural change or conservatism in which the essential factor is the frequency of contact between individuals, outside the bounds of close kinship; and this is, at least partly, determined by the size and density of contiguous population-groups. To the extent, therefore, that it is the prehistorian's business to identify and to interpret changes in material culture, the evidence for the size of the population inhabiting a specified territory is as relevant and as important as, say, the evidence for the contemporary 'natural' environment' (Atkinson 1972, 107; emphasis added).

That New Archaeology could obviously not realistically come to terms with the totality of any period's sites in any given region/area undermined its attempts at landscape-settlement modelling; this being equally true of whether it was Neolithic campsites, an Iron Age Lake Village or Romano-British towns and their hinterland support networks (eg, Tilley 1979; Clarke 1972; and Hodder 1972; cf. Evans *et al.* 2006).

Where British archaeology has recently seen considerable methodological innovation has been in landscape evaluations. Only broadly

	Rural Settlements				Major Farms				Shrine	‘Centre’
	Little Theford	Prickwillow Road	West Fen Road	Haddon	Orton Hall	Vicar’s Farm		Langdale Hale	Snows Farm	Stonea
Area (ha)	0.4	1.8	2.3	2.5	1.5	Total 6.0	Core 1.4	1.8	0.3	1.5
Pottery	1,833 4,583	3,215 1,786	1,915 832.6	7,000 2,800	44,000 29,333.3	12,406 2,067.7	10,805 7,717.9	15,988 8,882.2	2,639 8,708.7	40,594 27,062.7
Bone	1,328 3,320	694 -	2,967 1290	1,639 – I.D. -	12,153 8,102	16,797 2,799.5	13,098 9,355.7	18,287 10,159.4	32,933 108,678.9	18,676 12,450
Coins	7 17.5	30 16.7	15 6.5	81 32.4	63 42	339 56.5	303 216.4	81 45	74 244.2	60/936 40/117
Copper Small Finds	22 55	14 7.8	5 2.2	24 9.6	47 31.3	30 5	23 16.4	20 11	17 56.1	73 48.7
Glass	- -	5 2.8	7 3	- -	90 60	83 13.8	26 18.6	13 7.2	9 29.7	72 48
Other Styli	-	1	-	-	-	1 0.17	1 0.7	1 0.56	-	2
Lamps	-	-	-	-	1(?)	-	-	7	-	-
Querns	1/? 2.5	11/? 6.14	28/? 12.2	9/3.9kg 3.6	0.67 7/? 4.6	71/37.7kg 11.8	43/26kg 30.7	3.9 162/138.9kg 92.2	2/? 6.6	23/? 15.3

Table 29.1: Cambridgeshire Roman site 'league table', with bolded numbers indicating per-hectare factoring of finds categories (by number) and grey-toning denoting the highest sites densities in each case. Note that the inclusion of some entries is highly qualified; together with individual site-citation, these will be detailed in the forthcoming CAU volume, Process and History: Prehistoric and Roman Fen-edge Communities at Colne Fen, Earith (Evans *et al.* forthcoming)



Table 29.2: Comparative site mapping densities (see eg, Williamson 1984; Taylor 2007; and Luke & Preece 2011 further to Romano-British settlement densities)

	Fox 1923		Kirby & Oosthuizen 2000		Evaluation Projects
	No.	Density (per sq km)	No.	Density (per sq km)	Ave. Density (per sq km)
Iron Age	4	0.001	69	0.15	2.8
Roman	21	0.05	76	0.2	1.9

corresponding to ‘survey’ investigation in other contexts, the dovetailing of the battery of techniques that are now widely applied – variously fieldwalking (coarse-scale), aerial photographic analysis, geophysical investigations, test pitting and/or many kilometre’s length of trial trenching – in addition to their sheer scale and resourcing, is entirely unprecedented. This is to the point that it almost amounts to an entirely new type of practice, as it has a potential for near-total ‘site capture’ that is not possible through only the application of a single survey technique alone. Given this, it is surprising that evaluation results are not themselves generally published or, otherwise, not in any detail (see Hey & Lacey 2001).

A recent volume concerned with the archaeology of the South Cambridge environs overviews four landscape-scale evaluation projects in the south of the county (Evans *et al.* 2008). Together extending over some 11 sq km and variously including the range of the area’s clay, chalk, gravel-terrace geologies and topography (eg, downlands, clay plain, and river valleys), a similar suite of investigation techniques were employed on each, so that their results can be considered directly comparable. While earlier prehistoric sites were recovered in each, and Saxon in two cases, it is the Iron Age and Roman settlements that provide the most consistent and highest densities: respectively, on average, 2.8 and 1.9 sites per square kilometre, with the sites lying at an approximate interval of 300–500 m from each other (later Bronze Age sites occur at similar densities on lighter geologies, but not across heavier lands). Not all need, of course, be directly contemporary. These densities are, nevertheless, consistent with the results of other large-scale campaigns of landscape investigation within the region, such as at the Biddenham Loop (Luke 2008), the Upper Delphs, Haddenham (Evans & Hodder 2006b), Ely (Evans 2000b; Evans *et al.* 2007), and Stansted (Havis & Brooks 2004;

Cooke *et al.* 2008). Together, the data certainly demonstrates that ‘the past’ saw much denser settlement than has been assumed.

Here, again, an historic perspective aids understanding. To this end, the area/spread encompassed by the Cambridgeshire projects was ‘framed’ and within this catchment comparison was made between their recovery and those from Fox’s 1923 site-period mapping in *The Archaeology of the Cambridge Region* and, also, those within *An Atlas of Cambridgeshire and Huntingdonshire History* of 2000 (Table 29.2; the latter, reflecting the sites known in the later 1990s.) The ramifications of these figures are staggering. They suggest that within the c. 460 sq km Cambridge-centred study-frame there should, in total, be some 1285 Iron Age and 872 Roman settlements. Based on the *Atlas*’ distributions, it indicates that only 5.3% and 8.7% respectively of the area’s sites are/were known and, moreover, it represents a more than 320- and 40-fold respective increase in the number of sites since Fox’s day.

Such numbers imply that matters of *scaling* now need to sit at the core of fieldwork (see also Lock & Molyneaux 2006). This does not just relate to inter-site comparison, but also to how landscapes are themselves tackled. Clearly, practices must move beyond only discovery-led agendas. Recent huge-scale evaluations show that, at least in southern England, generally ‘everything is everywhere’ if you investigate at sufficient scale. Yes, classes of Neolithic and earlier Bronze Age monuments and ‘robust’ modes of contemporary settlement apparently avoided heavy claylands (if given the choice; see eg, Clay 2002), but it should no longer come as a surprise to find, for example, traces of Neolithic usage/visitation or, conversely, Saxon settlement in any particular landscape. Rather than the occurrence/absence of sites from any one period, the focus should instead shift to statistical gauging of the varying intensity of usage/occupation over time.

Another outcome of the recent spate of excavation, and the knowledge now of just

how intensely settled was the landscape during later prehistory and Roman times, must be a recognition that many sites are relatively banal. Yes, they would have all undoubtedly been ‘arenas for the negotiation of social and gender relations’, but their settlement architecture, field systems, economy, and depositional practices often show little significant variation. There is nothing surprising in this, as, with fieldwork occurring at this intensity, what we are now effectively engaged in is digging the *fabric of land*. Those of us who have had extended experience of working abroad in ‘ethnographic situations’ are familiar with how alike the villages or campsites of any given social/ethnic group can be. Details vary on a household-by-household or village-by-village basis, but the basic grammar of their material/spatial universe holds together and repeats; that, after all, lies at the heart of such concepts as structuration. This, of course, is only a matter of a coarse-grained or broad type-category resolution, beneath which surely lie subtler material culture and/or socio-economic distinctions. Yet, while seemingly ‘everyday life’ or ‘settlement fabric-type’ repetition and information redundancy should not be confused – and we must be wary of too easily thinking that the latter has been achieved – *the current low-intensity excavation sample is simply too coarse to provide a finer resolution archaeology*.

### Against flagships

‘Every decade produces one or more sites of outstanding importance and impact, that linger on in the literature or sparkle briefly on the glossy pages of ephemeral publications. *The archaeologists come and go, new names and sites outshine the old ...*’ (Clarke 1968; emphasis added).

While it maybe inspiring to realise that, at least locally, we might soon be able to gauge settlement-density ‘totalities’, the recognition of how much past there was can seem daunting. Just when it might seem possible to entertain the conceit that, for certain classes of site, thresholds of regional information redundancy might be glimpsed, the numbers outlined above tell otherwise. By way of example, to obtain a 2% sample of the estimated 1285 Iron Age sites within the Cambridge-centred study-area would require the excavation of some 25; we are still shy of that figure, but it will probably be achieved in the next 5–10 years. Of course, a host of caveats arise from this. Focused as

development is, its resultant fieldwork alone may never be representative of the sub-region as a whole; the area does not itself constitute any manner of ‘ideal land surface’ and its distributions will surely not have been uniform. Equally relevant is what relative size of an investigation counts towards the excavation of a ‘site’ (i.e. evaluation keyhole *vs.* total settlement-area) and whether all classes of a period’s site-types would thus be appropriately sampled (eg, ‘forts’ *vs.* settlement; compounded and single-unit enclosure forms). These figures, nevertheless, allow us to appreciate what potentially lies ahead and to identify the sheer data-handling abilities required to seriously analyse the results from this many sites alone. Certainly, the estimated 150,000–300,000 finds those Iron Age sites might yield would test the limits of any academic syntheses (and exceed the capabilities of most single-PhD research). Furthermore, this is only a matter of ‘small beginnings’. Consider what would be the resources needed if these figures were factored by the c. 2150 sq km of Cambridgeshire as a whole (excluding its fen marshlands: 6020 sites; 120, 2% sample), let alone East Anglia (c. 13,150 sq km; again, minus the Fens). It is not for a moment being proposed that the South Cambridgeshire densities amount to any kind of absolute index to be applied to the country or region as a whole, but they are an appropriate starting point to think about ‘the problem’.

Leaving aside the issue of what actually are the cognitive thresholds of excavation-derived pattern recognition, the knowledge that, at least for later prehistory and the Roman era in southern England, settlements generally lay only a few hundred metres apart should entirely recast the project of its archaeology. That their inhabitants could probably have waved to their neighbours makes it quite a different matter how we think such societies reproduced and the manner in which information/style variously spread and was communicated. Certainly, our interpretative framework has yet to catch up with the challenge of this data. Given the number of sites involved, it becomes, for example, incredibly unlikely that you will ever actually excavate a true ‘first’ – be it the advent of metallurgy or gender inequality – instead, it is the charting of *the transmission of change* that is paramount (as opposed to the chimera of origins). A degree of interpretative ‘modesty’

should also accompany the acknowledgement of these densities, as all this effectively amounts to a new 'loss of innocence' (Clarke 1973). Akin to the historical-present (but multiplied by time-depth), the past was clearly an incredibly complex and cumulatively dense place, to which no single-approach 'fix' or 'ism' is likely to ever do justice.

For almost a century now British archaeology has essentially operated on a 'flagship-site' model and the notion that certain sites somehow encapsulate the social/cultural dynamics of their periods, be it Star Carr, Skara Brae, Peacock's Farm, Windmill Hill, Stonehenge, Fengate, Maiden Castle, Glastonbury, or Little Woodbury and so on (see Gamble & Lawson 1996 on excavation 'flagships and dredgers'). Already having a well-established pedigree, these tend to encourage reinterpretation and often attract further excavation, whereas the impetus (and orchestration) of 'virgin excavations' is often to accrue comparable status and notice. Given the mass of excavation now annually undertaken in this county, such aspirations are no longer very realistic, nor are they necessarily desirable. Invariably, certain sites speak more directly of the past than others, but surely the pace of excavation must now change 'the game'. If nothing else, it becomes ever more incumbent upon us to synthesise data and engage with the site literature as excavation-context/results mount up daily.

What faces us is the challenge of numbers and this is something the discipline has never really seriously dealt with (Britain – or, at least, England – has long been weak in centralised fieldwork co-ordination in comparison to much of the continent and, arguably, has seen an academic 'Archaeology against the State'; Evans 1995). Seeing fieldwork as contributing to the understanding of past landscape fabric implies that all site interventions, no matter how commonplace some may seem, have their contribution; but, for this, basic measures of data need to be provided so that their place in the greater scheme of things can be readily appreciated and a truly comparative basis of archaeology realised. Equally, when faced with such site numbers, there also comes an onus for methodological innovation so that new facets of data and modes of interpretation can be teased-out. The goal of excavation must not be allowed to just become the

enactment of a standard-specification routine. In point of fact, and in return to this paper's opening arguments, we owe it to ourselves (and perhaps even the future) to think of *each site as an experiment*, not as a job, but as *situated projects*. This need not have any implications concerning the quality of base-line recording, but simply reflect a commitment to 'push the envelope' in a genuine effort to learn more and, at risk of sounding 'boy scout-ish', do the best in our time. To wit, it would surely be beneficial and more realistic to think of the entire project of development-led archaeology as a great experiment (ie, 'digging the better part of everything'): not as a given to be taken for granted, but something unprecedented and evolving – and always risking failure. These are certainly exciting times in archaeology, but amid its whirlwind intensity some co-ordination is surely required to fulfil its potential and, along the way, there is a constant need to consider the direction of this project (*cum-experiment*).

## Acknowledgements

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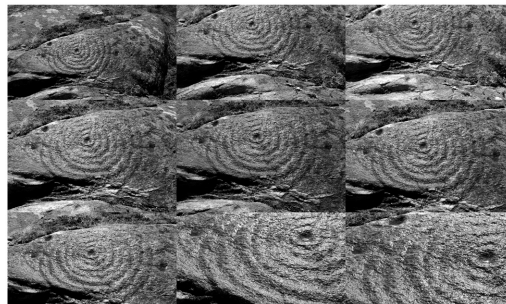
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## Four Sites, Four Methods

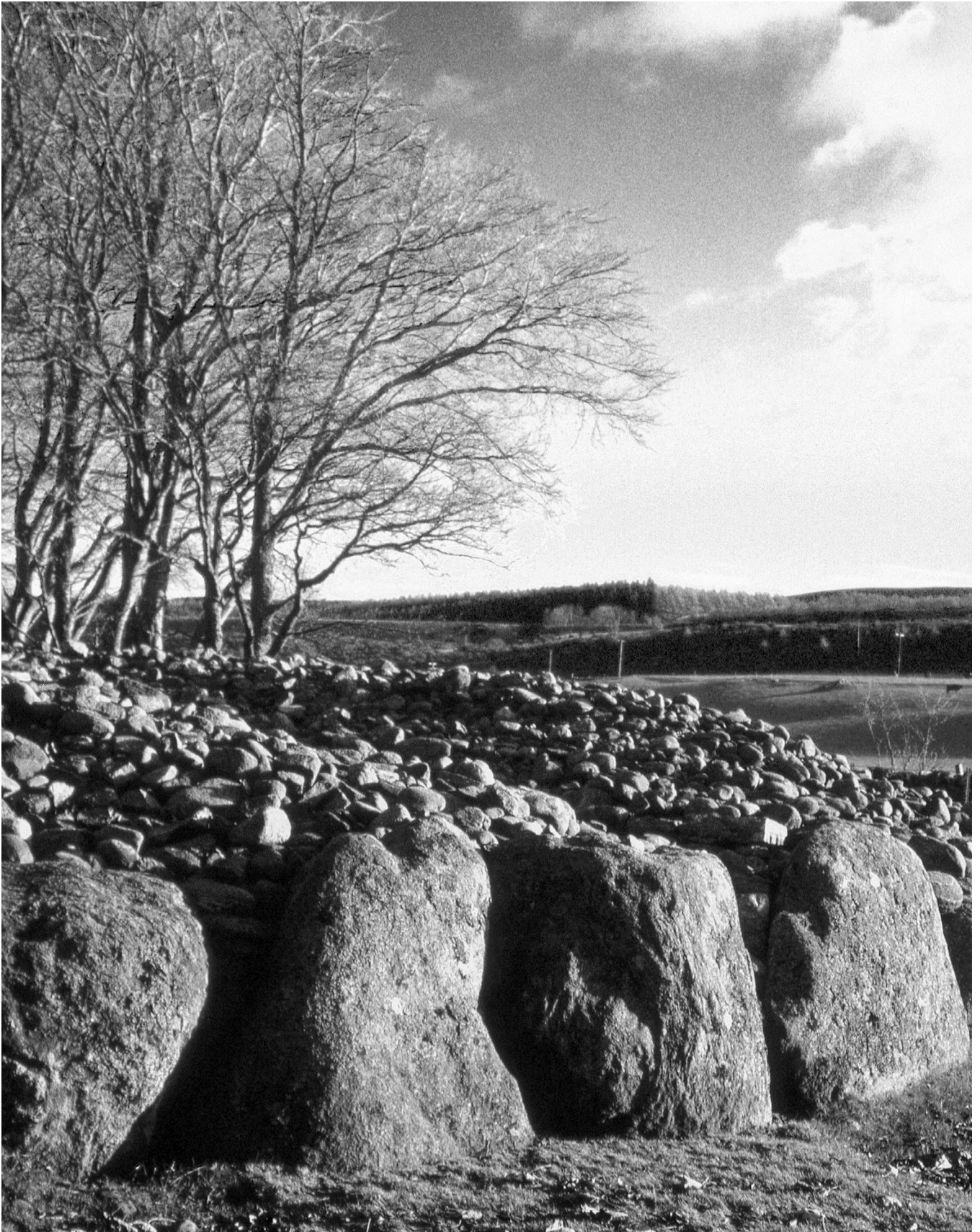
*Aaron Watson*

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*In the late 1990s I began to explore how the visual layout of a paper might transform the ideas and interpretations that it conveys. I now experiment with both still and animated imagery, and my ongoing work with Richard Bradley reveals a shared concern with the visual presentation of archaeology – from artworks to photography. In this respect I have been fortunate that our collaborative field projects have taken place within sites and landscapes that are visually engaging. The following pages reflect upon these experiences, and Richard's influence upon my own journey towards a 'multimedia archaeology'.*







# Four Sites, Four Methods

## Aaron Watson

I first met Richard Bradley in 1991 while studying undergraduate archaeology at the University of Reading. He was later to become my doctoral supervisor.

Over the years I have worked with Richard on a range of fieldwork projects, investigating sites as diverse as rock art, stone circles and passage graves.

In February 2011 I embarked upon a retrospective journey to visit four sites that, for me, epitomised Richard's approach to archaeological fieldwork. At each location I distilled a 'method' that has had a major impact upon my own archaeological practice, from artworks to archaeoacoustics.





## Site 1

### Great Langdale

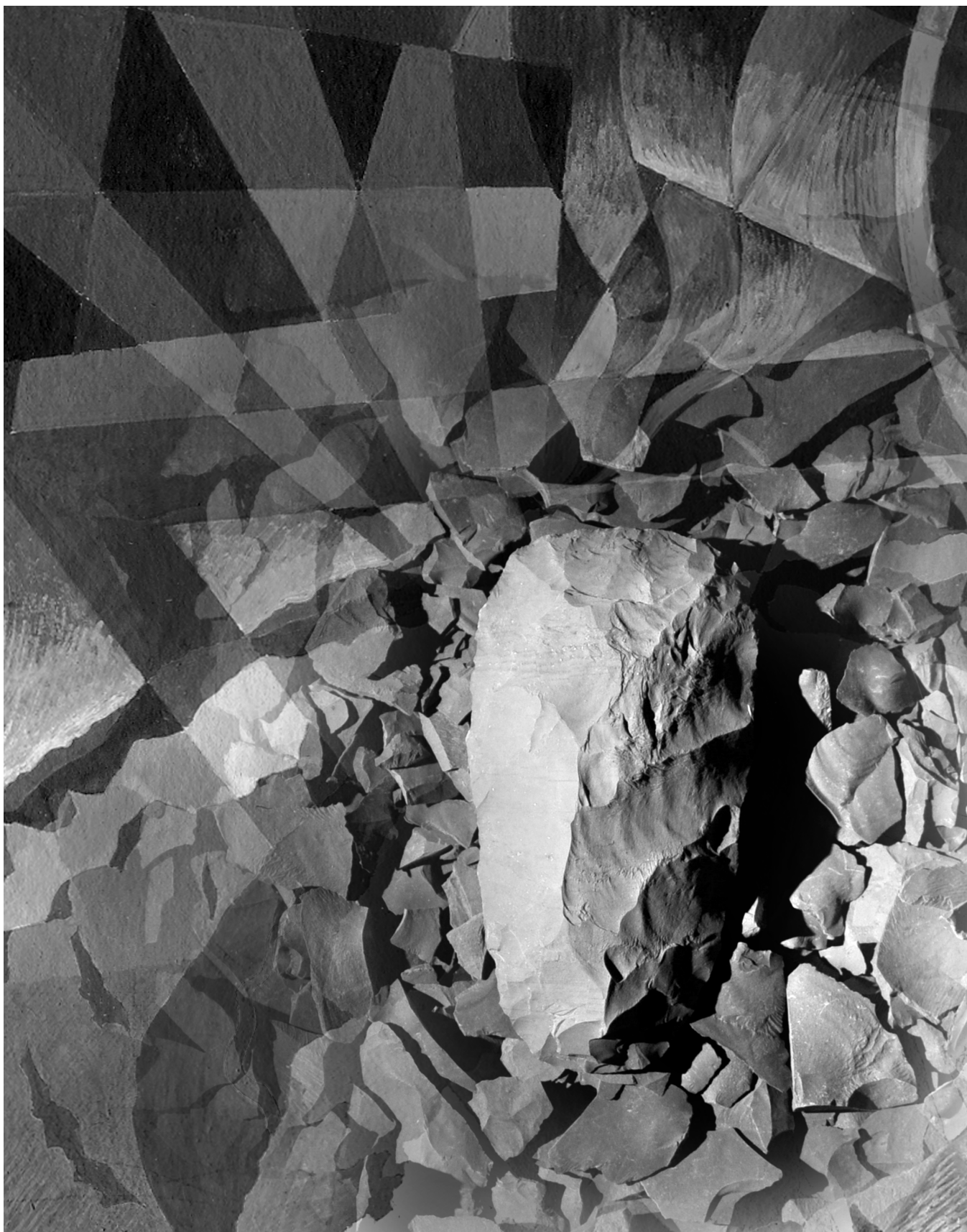
In the 1980s, Richard collaborated with Mark Edmonds to investigate Neolithic quarrying in the Lake District of northern England (Bradley & Edmonds 1993). They explored both the organisation of the quarries and the movement of their main product, stone axes, across the British Isles.

In 1992, Richard suggested that I undertake my own research upon the Lake District fells. I systematically recorded the quarry locations, developing the idea that their situation did not reflect the most efficient use of raw materials. Many seem to be unnecessarily distant from access routes, and in some cases are on steep ground that is hazardous to reach (Watson 1995).

The value attributed to Lake District stone axes by Neolithic people was not solely determined by the quality of the raw material. It seems that they were also imbued with meanings derived from the circumstances of their origin. The settings of the largest quarries highlighted unique qualities of the mountain environment – spectacular views and dynamic weather.

Stone axes were not only effective artefacts; they were ‘pieces of places’ (Bradley 2000a, 96).





# Method 1

## Pieces of places

For decades, reports on the Lake District quarries described them as factories. My study was concerned with demonstrating statistical patterns in their location. Neither approach explains why Neolithic people extracted stone in ways that appear to defy economic rationality.

As ‘pieces of places’, stone axes had more subtle connections with landscape. Frustrated by statistics I began to create drawings and paintings of the stone quarries. These media were better able to accommodate subjective qualities of place such as changing light, depth of view, atmospherics, colour and aesthetics. This helped me to acknowledge that these sites could only be interpreted by seeing beyond the facts and figures.

Traditional archaeological visualisation can be insufficient to capture more subtle qualities of experience. I went on to consider other Neolithic understandings of climbing mountains that might have lent significance to the stone axe. In particular, I was struck by how distant lands appear to rise out of the Irish Sea as an effect of the curvature of the earth (Watson 2005a).





## Site 2

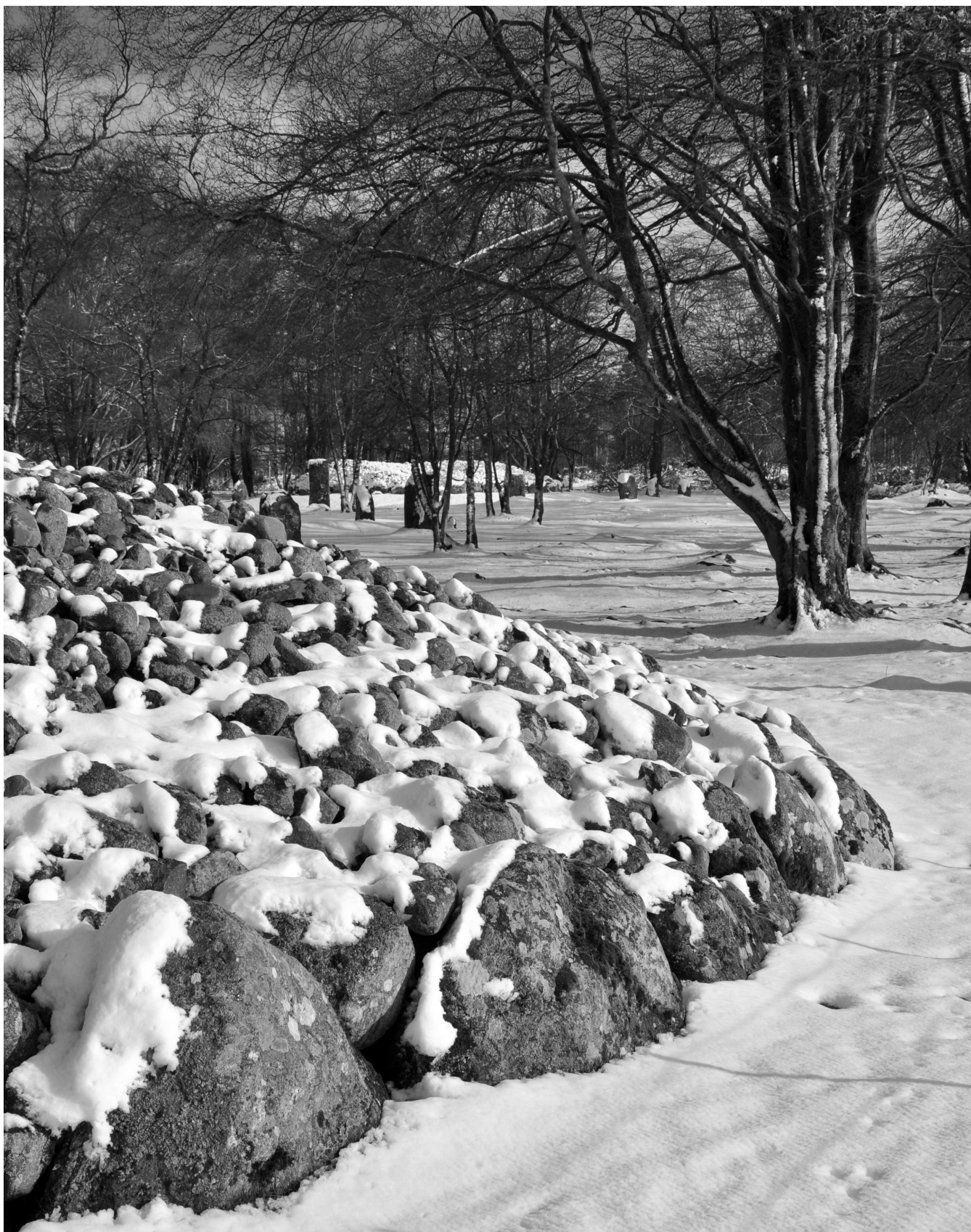
### Balnuaran of Clava

In the 1990s I worked with Richard to investigate the Clava Cairns, a distinctive group of passage graves and ring cairns in the north of Scotland (Bradley 2000b). The project sought to establish the sequence and date of these monuments, focusing on Balnuaran of Clava near Inverness.

It had long been recognised that Clava Cairns were aligned towards the south-west, the direction of the winter solstice sunset. The project expanded this by identifying further patterning in the structure of the cairns at Balnuaran of Clava, including hidden cup marks and selective use of stone colour and texture. We noted that the cairns were often built in valleys that are also oriented to the south-west.

Many of these details were only recognised because of extended observation over several seasons of excavation, complemented by fieldwalking in the wider landscape. We were 'taking time to become acquainted' (Bradley 2000b, 214).





## Method 2

### Taking time to become acquainted

Familiarity with sites and landscapes can only be gained by repeatedly visiting them in contrasting seasons and at different times of the day and night. Previous to the Clava Cairns project my visits to sites were recorded using a camera and notebook. My movement around a site was therefore mediated by the compositional requirements of photography, often during a single visit in the daytime.

In contrast, we experienced Balnuaran of Clava by daylight, starlight and moonlight, and all year round in sun, rain, and snow. This placed emphasis upon the senses and movement, dissolving a tendency to 'see' monuments as fixed types of architecture. This challenged the static, monochrome and silent portrayal of the archaeological record that is perpetuated by printed media. It was during the Clava project that I first began to explore the acoustics of ancient architecture (Watson & Keating 1999).





## Site 3

### Tomnaverie

In 1999 I worked with Richard at Tomnaverie. This was part of a broader investigation of recumbent stone circles across north-eastern Scotland (Bradley 2005). These monuments can have extended biographies, with elements of their design being influenced both by topography and the cycle of the moon.

One of my roles was to survey the site and produce a plan. I used tape measures and a theodolite to translate my lived experience into an abstract two-dimensional projection. Despite such attention to detail, this specialised 'archaeological vision' neglected many other qualities of the site.

Similar to Balnuaran of Clava, the time we spent excavating at Tomnaverie began to reveal rather more theatrical qualities. Set upon the crown of a low hill at the focus of a broad basin, Tomnaverie is an archetypal 'theatre in the round' (Bradley 1998, 116).





## Method 3

### Theatre in the round

Stone circles and henges are often situated to create the illusion that they are at the centre of a 'circular landscape', defined by hills and valleys. Colin Richards observed this in Orkney (1996), and Richard noted similar characteristics elsewhere (Bradley 1998). The distinctive landscape setting of circular monuments was the topic of my doctoral research (see Watson 2001 and 2005b).

For me, the extended time spent working at Tomnaverie crystallized this monument as the centre of the landscape. The heather-clad uplands that contain the site are visible in daylight and moonlight, an effect reinforced when snow lies on the high ground. The world pivots around Tomnaverie. To spectacular effect the weather appears to encircle the monument. Clouds, storms and rainfall often track around the margins of the basin, leaving the stones isolated in a pool of sunshine under a circular patch of blue sky.

Survey enacts a particular kind of archaeological vision that is concerned with objective recording. In contrast, I found that qualities of light and weather observed at Tomnaverie might be more effectively represented through the production of other kinds of media, including collage and film (Watson 2009).





## Site 4

### Ben Lawers

Between 2007 and 2010 I collaborated with Richard to investigate rock art on the Ben Lawers estate in central Scotland. The project explored this rugged landscape from the shores of Loch Tay to the mountain peak of Ben Lawers itself.

Our plan was to excavate test pits around carved and uncarved rocks to test for the presence or absence of stone artefacts. At the same time, pollen sampling demonstrated that Ben Lawers was a predominantly grassland environment in prehistory. Just like today, the people who made the rock art would have had panoramic views over Loch Tay.

This is significant because while we were test pitting, we were also watching the light on the loch below.





## Method 4

### Test pitting versus the light on the loch

Test pitting on Ben Lawers demonstrated that decorated rocks were associated with chipped quartz, interpreted as fragments of the hammerstones used to create cup and ring marks. At the same time, the rocks with complex decoration were located at optimum viewpoints to see light from the sun or moon reflected upon the surface of Loch Tay. We also noted that the metallic lustre of mica rich rocks echoed the glittering water, and reflections of hills and the sky could create the illusion of an underworld.

For me, it is this convergence of empirical data with wider observations that makes Richard's approach to archaeological fieldwork so distinctive. In many ways Ben Lawers converged methods from previous projects. Like Great Langdale, the rock art is set within the dynamic light and weather of an upland landscape. Like Balnuaran of Clava and Tomnaverie, the project allied excavation and survey with embodied experiences of the landscape.

Over the past twenty years, Richard has encouraged me to undertake my own experimental projects (Watson 2009) and integrate creativity within research (see Watson 2005c and Jones *et al.* 2011). His infectious energy and enthusiasm are legendary. In these notes I hope to have captured the spirit of Richard's remarkable contribution to the discipline. Four sites and four methods that have transformed the relationship between fieldwork practice and the interpretation of the archaeological record.





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